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HEARINGS ON H.R. 1804—GOALS 2000: EDUCATE AMERICA ACT

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Hearings On H.R. 1804-Goals 2000: E...

HEARINGS

BEFORE THE

SUBCOMMITTEE ON ELEMENTARY, SECONDARY, AND VOCATIONAL EDUCATION

OF THE

COMMITTEE ON EDUCATION AND LABOR

HOUSE OF REPRESENTATIVES

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

HEARINGS HELD IN WASHINGTON, DC, APRIL 22, MAY 4, AND 18, 1993

Serial No. 103-17

Printed for the use of the Committee on Education and Labor



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HEARING ON GOALS 2000: EDUCATE AMERICA ACT

THURSDAY, APRIL 22, 1993

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ELEMENTARY, SECONDARY,
AND VOCATIONAL EDUCATION,
COMMITTEE ON EDUCATION AND LABOR,
Washington, DC.

The subcommittee met, pursuant to notice, at 10 a.m., Room 2175 Rayburn House Office Building, Hon. Dale Kildee, Chairman, presiding.

Members present: Representatives Kildee, Ford, Sawyer, Roemer, Unsoeld, Reed, Miller of California, Becerra, English, Strickland, Owens, Romero-Barcelo, Green, Woolsey, Goodling, Petri, McKeon, Gunderson, and Roukema.

Staff present: Susan Wilhelm, staff director; Andy Hartman, education coordinator; Jack Jennings, education counsel; Jeff McFarland, subcommittee legislative counsel; Margaret Kajeckas, legislative associate; Diane Stark, legislative specialist; Tom Kelley, legislative associate; Lynn Selmsen, professional staff member; and Jane Baird, education counsel.

Chairman KILDEE. The subcommittee will come to order. We are meeting this morning to receive testimony on Goals 2000: Educate America Act, the administration's systemic reform bill. We have a single and very distinguished witness at this morning's hearing, the Honorable Richard Riley, Secretary of Education, former governor of South Carolina.

This is the Secretary's first appearance before the Committee on Education and Labor and I know all of us want to extend to him a very warm welcome.

This is my 17th year in the Congress and over that period of time I have worked with a number of Education secretaries and none came to their job with stronger qualifications, greater experience or reputation as an education leader than does Secretary Riley.

He is recognized nationally. We all know what he did in his own State of South Carolina to really put that straight on the reform path, and we all appreciate that because we live in a mobile society, and what happens in South Carolina affects the entire country. You certainly did a splendid job there, Governor.

Mr. RILEY. Thank you.

Chairman KILDEE. Over the last 2 years this subcommittee has devoted substantial attention to education reform and we look forward to the Secretary's testimony.

Goals 2000: The Educate America Act will provide grants to States and local schools for comprehensive education reform. It would also promote the establishment of voluntary national education standards to assist States and local schools in their reform efforts.

A third component of the bill would establish a national board bringing together business, labor, and education to promote the development of voluntary occupational skills standards. These voluntary occupational skills standards would provide an important foundation for reforming the manner in which young people are prepared for the world of work.

Before we begin, I would like to recognize my good friend and ranking Republican member of this subcommittee and the full Education and Labor Committee, Bill Goodling, for any opening statements he may have and he will be followed by the Chairman of the full committee, Mr. Ford.

Mr. Goodling.

Mr. GOODLING. Thank you, Mr. Chairman. We too welcome you, Mr. Secretary. I know you have been up on my floor quite a few times over the last several weeks and it is good to have you now in the subcommittee.

Mr. Chairman, you and I started work on this school reform legislation almost 2 years ago when we initiated work on H.R. 3320, the Neighborhood Schools Improvement Act.

I continue to believe that there is a limited role for the Federal Government in encouraging and assisting States in undertaking major efforts to reorient school systems toward a focus on learning and achievement. It has been a long, rocky road since the first bipartisan effort.

Clearly, the bill Secretary Riley is here to present to us today is a new variation on that original approach. In some aspects the legislation improves on the original bill; in other areas I think it may have fallen short of the mark or erred from the target.

My understanding of what school reform was all about was a process by which the public and educators first formed a consensus about what the goals and outcomes of the educational process should be. From that starting point they would use their ingenuity and skills to fashion an educational process by which all students would be able to achieve those goals.

I have some concern that this legislation has turned some of these original ideas on their head. For example, the bill requires that States and districts ensure that schools provide an opportunity to learn but does not require that States and districts ensure that students actually learn any more.

It is this disconnection between results and opportunity that troubles me. How can we know if students have an opportunity to learn unless we first know what it is they should learn and whether or not they have truly learned it?

There are many positive things in this legislation and I hope that we can build on them and create a bill that I can support that can

pass the House and the Senate and be signed into law by the President.

Thank you, Mr. Chairman.

Chairman KILDEE. Mr. Chairman.

Mr. FORD. Thank you, Mr. Chairman. I would like to revise and extend my remarks and first compliment you on the prompt way which you have responded to the administration on this legislation and worked with them to help develop the bill that is presented to us here today.

I spent some time discussing it with Mr. Goodling yesterday and I am optimistic that Goodling and Kildee and Ford will be back in business in a bipartisan way working on this bill very quickly, and we will do that as long as we can without getting anybody in trouble. We don't want to embarrass any of us by being seen in the wrong company, but we nevertheless will do our very best to work together.

Mr. Secretary, I want to say "I associate myself with the gentleman's remarks." That is the expression we use around here in the things that Mr. Kildee said about you. I have had the pleasure of meeting with you on numerous occasions in discussing not just this legislation but education from the perspective of the Federal Government in general and I have been mightily impressed from our first meeting and even more so in each meeting thereafter with the depth of your understanding of the fact that we have to change things.

Now your partner, the Secretary of Labor, has upset some educators by saying some of the things that Mr. Goodling and I have been saying here for a number of years about the same archaic vocational education in this country and about the fact that we are still targeting vocational skills for the turn of the century, and he is discovering that there are education traditions out there that reside mostly in the minds of people employed in education that are very hard to part with.

Now, I say that in spite of the fact that the Wall Street Journal said the other day that I was having difficulty with you about this bill because I was kowtowing to the NEA. After I read that editorial, I quickly asked my staff, who has been negotiating with your people and helping you, what has the NEA to do with this bill, and they tell me nothing. They tell me we have heard not suggestion number one about any changes in your proposal, nor have they asked me to support any particular change in your proposal.

And so for the public record, it ought to be made clear that any discussions we have had have been between Chairman Ford and Secretary Riley and not the NEA through Chairman Ford and Secretary Riley, and I don't say that by way of divorcing myself in any way from them.

They have been and I am proud to be their friend during all of my public career and I do rely on them very heavily for advice about what is happening and should happen in education. But I think that some of the outside interests in a way of looking for some sort of tension to make a newspaper story or make a newspaper point are searching very, very deep to find these kind of things that just don't exist.

I do not believe that I have ever seen a perfect piece of legislation introduced in the committee in the sense that everybody on the committee would suddenly look at it and say that's what I want to do and that is exactly the way I want to say it.

Before we are through with this legislation we will spend, I am willing to predict, maybe even hours arguing over semantics of a better way to say the same thing to get to the same place. It always happens on any legislation that does enough to be worthwhile.

And there will be people standing by the sidelines saying why don't you and he fight. Mr. Secretary, I detect no fight or tension between you, as the spokesperson for the administration, and the majority on this committee, and for that matter, the minority that I have talked to up until this point.

I think that we are going to be working together for some time but that we will have success with the legislation. You could not be in better hands than Chairman Kildee, who has an unblemished record in working for the future of education rather than the past of education, and I am looking forward to seeing how this legislation develops and I will be supporting you every step of the way.

Chairman KILDEE. Thank you very much, Mr. Chairman. Just to note that the only perfect legislation in the world was written on Mount Sinai and not on Capitol Hill.

Mr. FORD. That was an executive order.

Chairman KILDEE. Secretary Riley, you may begin your testimony.

STATEMENT OF HON. RICHARD RILEY, SECRETARY OF EDUCATION; ACCOMPANIED BY MICHAEL COHEN, CONSULTANT, OFFICE OF THE SECRETARY OF EDUCATION

Mr. RILEY. Thank you, Chairman Kildee, Chairman Ford, Congressman Goodling, members of the committee. I appreciate the kind remarks about both my involvement with education and my career.

My wife and I have just moved into a new apartment here and I couldn't get my shower to work this morning, my coffeemaker wouldn't work, and she put buttermilk on my cereal, so I feel appreciative of the little lift I got.

It is a real pleasure to be with each of you and to discuss the President's education reform bill, Goals 2000: Educate America Act. Like each of you, I am deeply concerned about the quality of elementary and secondary education in America.

We must improve our education system if we are to prosper as a democratic country and build a high-skill, high-wage economy. Education reform and improvement must be a high priority in all of our communities and States throughout this great country.

I ought to express my appreciation to all of you and to your staff members. You have given us a great deal of verbal and written advice and feedback, and we have attempted to deal with it and try to develop a balanced measure here for your consideration.

Unfortunately, too many of our students in America receive a watered-down curriculum and for far too many of our students we have low expectations. The other countries against which we com-

pete for jobs expect all of their students to take challenging course work in a variety of academic areas, including especially students headed for the workplace rather than a 4-year college.

As we approach the 21st century our prosperity and dreams hinge upon education as never before. The global economy is characterized by an information-rich world dependent upon technology and filled with high-skill, high-wage jobs.

In this world, workforces, businesses, communities and countries that are the smartest and that are the best educated will clearly do the best. We cannot afford to leave any student behind. Students must know well a variety of subjects from chemistry to foreign language, to geometry and the arts, from English and geography to history. Many more students must be competent in both academic and occupational areas as the world becomes smaller and more immediate.

A strong education system is, of course, good for its own sake for an individual, but now it is a social imperative in an ever-changing democracy, and an economic imperative in an international marketplace.

If we do not meet the challenges then we will face, as futurists say, an unacceptable future for many of today's children and their communities. The Goals 2000: Educate America Act is about taking this first step to an acceptable, brighter future for America's children and youth.

Robert Mosely, who is a civil rights activist, came to see me the other day to explain his algebra project. It was quite interesting. He started the algebra project to teach sixth and seventh grade pre-algebra and algebraic concepts because without algebra many occupations and postsecondary education are opportunities denied. Algebra is one of those gatekeeper courses.

He started his algebra project by using the subway system to teach the concept of positive and negative numbers. He now vividly demonstrates that poor and disadvantaged students, many African-American students, who previously may never have taken algebra in 12 years of schooling could learn the challenging content and learn it in junior high school.

A teacher in California, Jaime Escalante, had a movie made about his teaching experience which vividly demonstrated that Latino high school students could learn and perform well in advanced placement calculus. We tend to achieve what we aim for and what we aim for is too low for many of our students.

Two weeks ago we released the math results from the 1992 National Assessment of Educational Progress. While progress was made from 1990 to 1992, far too few students reached the higher performance levels and the gap in performance between students of different racial groups remains unacceptably large.

It did appear, however, that students who took more difficult courses, who did more homework, and who watched less television performed better on the NAEP exam. Early signs are that more challenging math standards and curriculum recommended by the Nation's math teachers will make a positive difference in student performance.

In a world in which what you can earn depends upon what you can learn, today's young people will be destined for a future of

lower pay unless we can help many more of them take and master more challenging subject matter.

Therefore, Mr. Chairman, we need to redouble our efforts, in my judgment, to meet the national education goals to help all children, regardless of their circumstances, meet these challenging standards. That is why putting goals and a bipartisan goals panel in formal national policy to report on progress is so important and is part of this Goals 2000: Educate America Act legislation.

To achieve these goals will require a fundamental overhaul of our education system and new relationships and partnerships between our schools and parents, educators, community groups, social and health agencies, business, higher education and early childhood services.

At the Federal level we can best help by supporting local and State reformers by motivating, leading, and providing information and seed money for State and local communities that are looking for ways to improve.

The Goals 2000: Educate America Act is about change. It is designed to expand the use of challenging curricula, instruction, and assessments geared to world class standards and to do that for all students.

The Goals 2000: Educate America Act will help to identify voluntary internationally competitive standards for what students should know and be able to do in each of the major subject areas and the occupational areas.

Students, teachers, parents, communities and States can use these voluntary standards developed by the National Education Standards and Improvement Council to judge their own performance.

Studies now report that American students do not do as well as students in other industrialized countries, yet currently we have no way to provide educators and parents, students or policymakers throughout our Nation with information about the content and the rigor that students in other countries study and to then match this information to our own American expectations for students. The Goals 2000 process will identify and make such information available throughout America.

Similarly, we do not have information available about what constitutes internationally competitive opportunity to learn standards. Through the Goals 2000 Act voluntary, exemplary opportunity to learn standards will be identified in essential areas related to teaching and learning, such as quality and the availability of curricula, materials and professional development of teachers, to deliver this higher content. The information will be made available by the National Education Standards and Improvement Council.

Again, how can we compete internationally if we don't know what we are competing against? Goals 2000 will give us that information. The existence of standards will not change our schools.

We need sustained broad-based grassroots efforts of parents, educators, business, labor and citizens to provide every student the opportunity to reach these standards.

The Goals 2000 legislation will challenge every State and every community to develop comprehensive education plans to overhaul their schools so that every student in every school can reach these

challenging standards. It will activate the forces of reform which must occur in classrooms and in schools and in school districts and colleges and local and State government.

These changes should not be just for the sake of change but to achieve greater levels of skills and learning for all students, levels that are internationally competitive in academic and occupational areas.

Students and schools will work harder and smarter if they are given the challenge and the opportunity. Goals 2000: Educate America Act builds upon lessons learned from local and State education reform efforts of the past 10 to 15 years.

Unfortunately, the reform efforts have been disconnected and often not sustained, but these efforts have taught us that education reforms are more likely to work if they are comprehensive and systemic, that the pieces fit together like a puzzle; if they focus on challenging curriculum and better instruction for all students to help many more students reach higher standards; if they provide teachers and principals with new professional development opportunities to deliver challenging content and work to diverse student populations; if they involve more educators and parents, communities and businesses with school improvement efforts; if they are long-term, phased in over 5 to 7 years; if they have State assistance to encourage bottom-up local classroom innovation and school site planning; if they have accountability based upon results; and if they provide greater flexibility to encourage innovation and new ways of organizing the school day and the school year.

The local and State improvement plans under Goals 2000 will begin to address changes that best meet each school's, community's and State's unique circumstances. About 94 percent of the funds under this Act in 1994, \$393 of the \$420 million, are dedicated to these purposes, going out to the States and to the school districts.

Goals 2000: Educate America is only a first step, but it is a critical step to start America down the road to renewal in education. We need major new investments in early childhood and infant and national health, as the President has proposed. The Elementary and Secondary Education Act and the Office of Education Research and Improvement need to be reauthorized.

We in the Department, like you, are reviewing and reevaluating every part of the ESEA and the OERI to revitalize these important programs to help disadvantaged schools reach challenging standards and serve other purposes.

We need to have a new school-to-work transition, a youth apprenticeship program building upon the early successes of Tech Prep and other similar initiatives.

In addition, this bill would establish a National Skill Standards Board. American workers, employers, training providers and educators must know what knowledge and skills are required, and this part of the bill encourages the development and adoption of a voluntary national system of skills standards and certification.

The United States, unique among our competitors, lacks a formal system for developing and disseminating occupational skills standards. The challenge for us then is to lead and to act here in Washington, and that challenge is great. The challenge for educators,

parents, students and the public all across America to revitalize and reinvent our schools, and that challenge is great.

It has been 10 years almost to the day since the report entitled, "A Nation at Risk" was released. We have learned a great deal about education reform since then and it is time to apply these new lessons across this land.

The Goals 2000: Educate America Act, in my judgment, will do that. The President has sent the measure here for your consideration. Together I submit that we can be successful.

Goals 2000 starts us on the high road to success. It will take a lot of hard work from all Americans, but we must start with goals and standards and high expectations for all of our children and their futures. We must start with a plan, one that can energize Americans to reach for excellence and for quality.

We need your help and your support so this entire Nation can begin to work together to educate America. Thank you, sir. I would be happy to respond to questions, Mr. Chairman.

Chairman KILDEE. Thank you very much, Mr. Secretary. Mr. Secretary, while you were Governor of South Carolina your State pursued a very comprehensive systemic reform program, and I was down in your State right after the election and really felt a sense of excitement. I talked to some of the teachers down there and sensed a real commitment.

How are the lessons of that experience in South Carolina reflected in the Goals 2000 bill?

Mr. RILEY. Mr. Chairman, I think it is so helpful. A lot of people have said what has come out of all the reform efforts of the 1980s and a lot of governors, a lot of southern governors, who got programs underway—Bill Clinton was one of those governors, Lamar Alexander was another, Bob Graham, and so forth—really got into this business of education reform.

I would say that lessons were learned, some of them that certain things did not work well. Certainly it did not work well to have a spurt of energy unsustained and then have it drop back off, and that happened in a number of cases.

But I think that one of the big lessons we learned in South Carolina is, one, that you have to have a results orientation to make long-term progress. You have to deal with goals, you have to deal with a place to reach for, and you have to do it in a comprehensive way and you have to be practical in terms of hunting for easy solutions. They are not there.

Every child is different, every classroom is different, every teacher is different. The world is changing. Knowledge is changing every day. It is an exciting world to deal and be involved in, but I will tell you it must be hard work. It has got to fall back on the teaching and learning quality and not the desire to hunt for easy silver-bullet solutions.

I think the comprehensiveness, the accountability feature, the results orientation, the involvement of all children—every single child should be involved in the process. Systemic is the word that is now used. I never have liked that word particularly but it does describe everything fitting together and I think that is an important part of it and I think that is some of the main lessons that we have learned in the 1980s.

Chairman KILDEE. There is no one definition of what systemic means either, I found out, as I travel throughout the country.

Mr. RILEY. However you want to take it, I guess.

Chairman KILDEE. How did you involve the business community, the labor community, the education community and various elements in society that really are concerned with education?

Mr. RILEY. Education, Mr. Chairman, in my view, is clearly the entire community, and if you attempt to divorce the schools from the community you really end up with a very limited approach to education.

My wife, Tunky, headed up what we call the Citizen Involvement Committee and it was a very, very active committee with corporate presidents and involvement from teachers and labor and citizens, parents, grandparents, all types of citizen representative groups, that then combed out and got involved in all of the communities in the State in many, many different ways.

Education should be part of everything and that is, again, part of the comprehensive nature of this. These action plans that are proposed in this bill then call for that and that is part of what would have to be the State plan, and the school district and the school plan would be how they plan to develop and go about getting people involved in the school system and in excellence in education.

Chairman KILDEE. Thank you very much. I will pass on to Mr. Goodling now.

Mr. GOODLING. Thank you, Mr. Chairman. I will try to get five quick questions in before he turns the lights on. The Chairman always starts the lights right after the Chairman finishes speaking.

Chairman KILDEE. I'll do my best.

Mr. FORD. No, that is me.

Mr. GOODLING. Mr. Ford. Oh, that is you. I see. Well, I sent you a list yesterday of interests and concerns that I have so I will just quickly go over five things.

Experience with the National Science Foundation's systemic reform initiative in math and science found that sometimes States need more than a year in order to come up with a decent, well-thought-out plan.

My question would be would you support allowing the States a more flexible period of time to complete their reform plans but not allowing any implementation funds going to them until they have completed the plan and it has been approved? I think they can get implementation funds now the way the bill is written even though the plan may not have been completed and may not have been approved.

Mr. RILEY. Mr. Goodling, that is a very reasonable approach to an issue. I think it is important for all of these things to be going on at the same time. The main thing is that the plan would involve part of what you say; in other words, if it is going to take more than a year to arrive at that then the plan would say that and why it would take more than a year.

If you see, the first year we just think it is so important to have all of the State leadership thinking those kinds of things out and so they do have their own plan so I think that is a very reasonable approach so long as they—

Mr. GOODLING. I agree with your comments. I just want to keep their feet to the fire and I don't want them getting implementation money until you say the plan is good and it is completed and is approved.

As I mentioned to you before, currently we do not have any way of knowing whether we are making any progress toward goal number one and I had hoped that that would be included. Perhaps we can get it in to some kind of legislation so that we can find out where we are in relationship to goal number one. We do not have that kind of information. We need to get that kind of information or, otherwise, we do not know how to proceed in making sure we get to goal number one.

So my hope would be that somewhere along the line in the very near future that we can get something involved there so that we know where they are in relationship to their readiness to learn when they come to a formal setting.

Mr. RILEY. Well, my sentiment and the President's sentiment is exactly with you on the early childhood concept of development. I do not know that this bill is the place to get into that, but my sentiment is certainly with you.

I do think this: We make a very clear statement here and if this Congress passes this that every child be ready to learn when they go to school, start school, that is a very strong, powerful national statement, which then certainly should follow, Congressman, with efforts to see that then we can try to help see that that is done, so I strongly support your entire sentiment of your early childhood measures.

Mr. GOODLING. My third one deals with the role of national standards, both content and opportunity to learn. As we put them together it was all supposed to be models. I am not sure whether the legislation, by requiring NESIC to only certify them if they are consistent or comparable to the national standards, I am not sure that that is consistent with the whole concept of these are models. I am not sure they are models when you state it that way.

Mr. RILEY. Well, of course, I guess you can have more than one model to be consistent with national content standards. The content standards, as I observe this, would drive the entire process and they are arrived at of course, as you know, with a national consensus building process which is very healthy in itself. It is uplifting that Americans who know math out there are talking about what a fifth grader should know in math.

Then to have those content standards in place really is the goal, the direction for everything to move toward and I guess you could have several models which would all be consistent with reaching those high content standards.

Mr. GOODLING. I guess my concern was the whole bottom-up concept that you talked about in your testimony making sure that maybe the State and the local agencies have a greater opportunity to determine, help determine, those standards so that you get the bottom-up kind of concept that you were talking about.

Mr. RILEY. Absolutely. And, of course, the certification process is voluntary, as you well know. But, yes, you should have significant movement upward from the States and that is really how it begins because in the beginning of the action plans, of course, which is

completely separate from this process, the State must develop its own content standards, opportunity to learn standards, and assessment process and so forth.

Mr. GOODLING. I will lump the last two together. A State must in its plan establish a timetable for ensuring that every school in the State achieves the State's opportunity to learn standards. I have talked to you about that.

As a former governor, how would you go about doing this? How would you, as a former governor, ensure that all of the school districts are meeting these "opportunity to learn standards?"

Mr. RILEY. Well, I guess the first place would be to identify what are the standards that are necessary for any student in this State to have the kind of teaching and learning opportunity to meet the high content standards.

That would, of course, involve anything from teacher education to teacher development to a curriculum that is consistent with high standards, not some watered-down curriculum that doesn't expect this child to really be dealing with difficult issues, and education policy would be changed accordingly.

The State then, I think, could do that and would do it, identifying those things. It is not like what we used to think of as counting things as much as it is looking at the real opportunity to learn, what it takes for a young person, a disabled young person, a person who has limited English proficiency, a brilliant young person, all young people, to have the opportunity to learn and to improve and to reach high standards.

Mr. GOODLING. I guess my question, Mr. Secretary, was how do you ensure that. How do you ensure that all these school districts have met these ready-to-learn—not ready-to-learn, we used to call them—delivery standards?

Mr. RILEY. Well, of course, your original measure is a plan for that and development of it, but the State has the responsibility of accountability.

For example, in our State in our education reform measure we have a number of ways to ensure accountability by measuring through assessment and through other measures whether things are being done. That is a State responsibility and I think most States are very familiar with that and work with that now, so I would say it is an accountability characteristic that the State would have to develop.

Mr. GOODLING. As you know, I expressed my concern that they all would be doing these things now if they had the money to do it and if they do not have the money to do it they will not be doing it now after we pass this legislation but it will, I believe, preclude them then from participating in any reform movement and they may be the people that need to participate the most.

That is a concern I have expressed because if they cannot meet these delivery standards, and I think they would meet them now if they could do it, if they cannot meet those delivery standards then they cannot seek a grant, as I read your initial legislation, for reform.

Mr. RILEY. Congressman, that is not exactly right, as I understand it. They would have to have plans for moving towards meeting them.

Mr. GOODLING. But they would not have to be there?

Mr. RILEY. They would not have to. You know, again, that is probably a changing goal. It would be certainly prioritizing, we hope, the thinking to be moving towards teaching and learning.

In some situations that I ran into in my State it was not just a money problem. You can have all kinds of school problems. People are off onto the wrong priorities, disorganized or whatever. We had several school districts and under our provision in South Carolina that we could—the State decision to declare them bankrupt. The children simply were not getting an education. It was not bankrupt in terms of money; it was bankrupt in terms of education. And we had procedures to come in and the people welcomed that.

But, again, that is a State involvement to see that the kind of assessment measures and so forth showed that progress was being made for all children. And most of those were districts that were relatively poor but their funds were not managed well, they were not handled well, and, again, the communities themselves welcomed the State coming in and helping them get straightened out.

Mr. GOODLING. Thank you.

Chairman KILDEE. Mr. Ford.

Mr. FORD. Mr. Chairman, I took time for an opening statement so I will yield at this time to the other members of the committee.

Chairman KILDEE. Mr. Petri.

Mr. PETRI. Thank you, Mr. Chairman. I would like first to associate myself with the remarks of the Chairman of the full committee and the others in their opening remarks and say how much I am impressed by your debut on the national scene and the leadership you are providing in the education area. I look forward myself, and I know that others do on both sides of the aisle, to working with you in a real cooperative effort to do the best job we can for our students and young people in our country.

Mr. RILEY. Thank you.

Mr. PETRI. I have one or two questions I would just like to mention. I think from everything I have heard, you are sensitive to and share these concerns, but I think I should mention them.

One concern is that however good and well thought out a national program we might have of goals for education and helping education, there is the law of unintended consequences around this town and sometimes the result of having a brilliant plan or a well thought out program at the national level and then asking local people to discuss it and go to conferences and fill out forms to comply with it and so on is to shift the focus from the student and the classroom to paperwork and meetings and bureaucracy.

Therefore, I just hope that you and people in the National Education Department are sensitive to that sort of unintended consequence that can occur. It certainly has occurred with many smaller education programs where at the end of the day a medium-size school district gets \$50,000 or \$30,000 and to fill out the forms to get that money costs them as much or more than they actually benefit so they end up adding to their overhead and really not having many resources available.

We are diverting resources by putting in Federal funds rather than actually multiplying them where the rubber hits the road in the classroom and with the teacher and student and their parents.

Are you sensitive to that and are you going to try to avoid a shifting of that focus and having that unintended consequence from our activity here at the national level, however well-intentioned and well thought out it might be?

Mr. RILEY. Well, absolutely, Congressman. That is an excellent question because you have to be careful. When you create accountability you really are dealing with more paperwork, in most cases, and you have to draw a balance between all that. That is really kind of a State problem. We do not want to cause them to have more of a problem, because of what we are doing, than they should have.

Every effort here is toward getting the dollars for systemic reform down to the school level, as you know, and the push is down and the push is for things like professional development and not a whole lot of busywork, and I will be very sensitive to that and I appreciate your comment.

You do have to have a certain amount of accountability if you are going to have a massive school system work, but you sure need to always be sensitive about unnecessary, duplicative paperwork that takes away from the product of education.

Mr. PETRI. One other concern that I constantly hear in my office from employers in the area I represent is that there tends to be a focus which they feel is harmful to young people they are seeking to employ on credentials as opposed to ability to perform. And they find that if we are not careful in education we focus kids on being in school for a certain period of time to get a piece of paper but at the end of the day they can't do the job and they, therefore, are very interested in sort of outcome-based education and kids' ability to think and to react and operate in real time and change as they have to confront changing circumstances in the workplace, rather than just sort of meet a time requirement or some other requirement to get a paper credential.

I hope that as we go to national certification and so on we are not driving things toward more credentialism in our society at the cost of helping people actually be prepared to perform in the real world. I just express that concern.

Mr. RILEY. Thank you, and I am sympathetic to that view, sir.

Chairman KILDEE. I think we are going in the order that I observed people arriving, so I will call on Mr. Roemer next, and then Mr. Sawyer.

Mr. ROEMER. Thank you, Mr. Chairman, and welcome, Mr. Secretary. It is great to have you here and it is great to have somebody that in the past has not only been successful in building coalitions that set these goals for students but providing the resources to achieve these goals and achieve reform. So I am very anxious to hear your ideas today and over the next 2 years and work very closely with you and with the President in such an important area.

I have two questions. The first one revolves around the idea of this change in concept of education. If we had three Rs in the 1960s we all know what those three Rs were. Today, the three Rs are probably renew, reinvent and revitalize our education system and so much of that kind of revolves around change in curricula, as you pointed out, and instruction and in assessments.

Each one of those areas is intimately connected to our teachers having the ability to get new training and development skills.

Could you, as you did give me some ideas in your opening statement about Robert Moses, could you give me some ideas as to how we decentralize this to our schools so that teachers of the year that are teaching in our schools where I have a teacher of the year that has never been able to meet with other teachers in that school or have teachers come into her classroom to share why and what methods have helped her achieve that award.

The first thing cut in State budgets are oftentimes this development and training and if we are going to get change, this is a critical area.

The second question is in terms of reorganizing the school day and the school year. Having just visited inner city schools in Chicago, sometimes the schoolplace is the safest place and the most productive place for some of these students.

What ideas might you have on that concept as well?

Mr. RILEY. The first thing we would start to do, Congressman, is start the kind of conversation that you and I are having about that very subject. We will discuss these action improvement plans that will energize bottom-up and statewide school reform and statewide shared information that creates free-moving involvement in education. Education is not locked into one little place here. It is part of everything.

We have some provision in here for national leadership activities that would then enable us to do that from a regional standpoint. It is not a big piece of this but some funds that are provided for in the bill that would enable us to develop consortia among different regions to come up with better ideas to then disseminate technical assistance to help people put them in place and so forth. So we are dealing with that in those ways.

The other issue on safety, the fact is that is an issue that shows up in the schools oftentimes. It is not necessarily a school-caused problem; it is a community problem usually.

However, we all know that if you do not have a safe school you do not have a good school. If you do not have a safe anything is it no good. We, as Americans, especially for our children and especially in a learning context, must insist on that. We are all going to have to develop better ways of dealing with that over the months ahead and I would be very anxious to work with all of us on that.

This does elevate education's standard and interest and involvement and it gives us the opportunity to have these kinds of plans and movement and electricity going on that we hope would be beneficial and move to those kinds of responses.

Mr. ROEMER. Are you considering expanding the schoolday and the school year?

Mr. RILEY. This bill, in and of itself, would set in motion all kinds of things like that on the State level. As far as that is concerned, every State, I think, must look at it.

I know we have a study on time and learning coming down here very soon, and a lot of interesting work that is going on in that area. In South Carolina we did expand, I think, from 180 to 186 days and we expanded the day over a half hour a day.

So I think all the States will be working on that. We will be certainly looking at that in these action plans as one of the issues.

Mr. ROEMER. Thank you.

Chairman KILDEE. Mr. Gunderson.

Mr. GUNDERSON. Thank you, Mr. Chairman, and thank you, Mr. Secretary, for being here and for, frankly, being a leader on this issue. I am deeply hopeful that you can accomplish something we have not been able to accomplish in this town, and that is a bipartisan commitment to educational reform. If you can do that, hats off and I look forward to working with you in that regard.

I have a series of technical questions, and not to bore the audience but I think it helps us understand what we are trying to deal with here and probably Mike can help you out as I try to go through the draft that you have provided to us.

On page 61 you talk about the plans which would have to include a comprehensive local plan for districtwide educational improvement, but in that same section on page 63 you talk about the fact that at least 50 percent of the funds made available by a local education agency to individual schools under this section must be made available to schools with, frankly, chapter one criteria.

I am confused. Which is it? Do we mean districtwide reform at the LEA level qualifies for a plan or is it our intent that it only be school-based within each LEA based on the Chapter One criteria?

Mr. RILEY. Mr. Cohen gives me his analysis of that as the district focuses on the whole district.

Mr. GUNDERSON. If he wants, there are two mikes there. Mike, take the mike.

Mr. COHEN. The way this is designed, the district would be expected to develop a plan that would ultimately affect and involve every school in the district, but the funds that we provide are initially targeted to those schools that are in greatest need. Over time that could expand and over time the district may have to use some of its own resources to bring additional schools on.

Mr. GUNDERSON. I would hope you would work with us as, in particular, in rural areas this is impossible to comply with because you are going to have probably two, for example, elementary schools within a rural LEA. You do not have the data to figure out which one of those qualifies under Chapter One standards and which one does not. We are going to need some flexibility in that area.

The second question I have is: When does voluntary become mandatory? I think this is a difficult issue, but on page 48 on line three you literally say, "ensuring that every school in the State achieves the State's opportunity to learn standards."

Now, you recall that in a different section of the bill you say that the national council will certify State standards and opportunity to learn if they are comparable with the Federal standards, but then you go on here and you require that they ensure that every school in the State achieves the States' voluntary—no longer voluntary if you are ensuring that they must meet those opportunity to learn standards.

Mr. RILEY. This, of course, Congressman, deals with the strategy and timetable for the State plan and the strategy and timetable

would have to deal with that issue. Of course, the certification is a separate process.

If a State asks for certification on the national level, then that would bring into play what the national opportunity to learn standards are as they are developed through this consortia plan worked with NESIC.

Mr. GUNDERSON. So do you mean ensure or do you mean promote and encourage?

Mr. RILEY. Well, I mean ensure that a strategy and timetable is developed. They have to do that. They have to have a strategy for moving towards quality teaching and learning.

Mr. GUNDERSON. Statewide strategy is very different than ensuring that every school meets these "opportunity to learn standards." See, that is what I am trying to get out there.

Let's go to this next part that you brought up because on page 23 you talk about the council may certify content and student performance standards presented on a voluntary basis by States if such States are comparable in rigor and quality to the voluntary national.

What do you mean here by certification? I mean what does that mean? If you certify them do you say, well, it's a nice try or do you say, okay, we have approved it and your State may now apply for a reform grant? What does certification mean?

Mr. RILEY. It is not connected with the action improvement plan. It would simply, as we have said, be like a Good Housekeeping stamp of approval and that would be voluntary, as I said, and they would come in a voluntary way to ask for that certification. If it was applicable then it would be certified.

Mr. GUNDERSON. Before time runs out I want to ask one more question. In the composition of your NESIC council, if I read the criteria, there must be five professional educators, there must be five people who are either postsecondary educators or business people, one of which must be a businessperson, so you assume four could be postsecondary educators. You then have five public advocates, which could include school boards or State educational policymakers, and then you have five education experts.

If I read that, we could easily end up with 19 educators and one businessperson on this council. Do you think we ought not put in a little bit more of a balanced criteria to get diversity in that council?

Mr. RILEY. Well, Congressman, of course, those names would come in those categories from the bipartisan goals panel and then the President would pick the names from those submitted and I think the President and the goals panel would have the same kind of interest that you propose would be a process you would go through if you were sitting there making those decisions.

We can take a look at that but I do believe that would be covered.

Mr. GUNDERSON. Thank you, Mr. Chairman. Thank you, Mr. Secretary.

Chairman KILDEE. Thank you very much. Mr. Sawyer.

Mr. SAWYER. Thank you, Mr. Chairman. I would like to join my colleague from Wisconsin in associating myself with the remarks of the Chairman of the subcommittee and the Chairman of the full

committee, not only because of the substance of what they said but because I am told it is always a good idea to associate yourself.

Let me also add that I think all of us appreciate the collaborative effort that has been made over the time since you have been in office both to recognize the work that has gone on among the States in bringing us to this juncture and the work that has gone on in previous years on this topic within this committee and to meld them together into a whole that represents an extraordinarily fine beginning in that process.

It may be so, as Mr. Ford says, that no introduction is ever perfect. He told me a couple of sessions ago that, in fact, he had a bill that was very, very close to perfect. We won't go into that.

I am particularly interested in the efforts to define systemic reform. I know that in my State and a number of others, the governance structure for education is grounded deeply in the north-west ordinance. A great deal of diversity arises among school districts as a result of that kind of governance structure. We have some 16,000 different school districts, and we wind up trying to tailor, as my other friend from Wisconsin mentioned, grant standards formulas and funding formulas that take into account all of that diversity.

I am not suggesting that we ought to try to reach into the governance structures of the several States, but it seems to me that one of the ways in which we might encourage collaboration across jurisdictional lines is to build financial advantage both in terms of grant competitions and funding formulas so that you have the kind of collaborative effort from the ground up among disciplines not only over time, but over space, so that those small districts where Federal funds are often dribbled away because they simply don't have enough volume to do the job are encouraged to come together and operate in consortia.

We have been working on doing that bill by bill in a number of different opportunities as they have presented themselves, including math and science through the Eisenhower formula and the work that we have done in literacy funding.

But it seems to me that this is one of those elements of systemic reform that would be wise to speak to in this kind of measure, not to be specific but to encourage ourselves in future enactments and to provide advantage to the States that, with their own grant and formula funding, make sure that those districts and local education agencies that can work together do work together in order to magnify the power of the dollars that we distribute to them.

Could you comment on that?

Mr. RILEY. Yes. I would say that the intent of the proposals coming from the State and then the school districts and the schools would certainly—very clearly that would be encouraged and welcomed.

And then, as I indicated earlier, we do have some funds dealing with consortia to deal with regions from the Department's standpoint, and I think that is an excellent point and if we are going to get the most out of systemic reform we are just going to have to do that and I would certainly carry that belief with me also.

Mr. SAWYER. Just as a closing comment, Mr. Chairman, I fully appreciate the importance of consortia regionally among States and I think the same principle can apply well.

Mr. RILEY. It can.

Mr. SAWYER. I want to emphasize, as those of us who come from States like mine have, that I would not urge forced consolidation on anybody. I recognize that those district lines were drawn shortly after the Deluge and we would have to go back to Mount Sinai to get rid of some of those local high school mascots. I do not suggest that, but I do think some of those mascots can coexist and to their mutual benefit.

Thank you, sir.

Mr. RILEY. Thank you very much.

Chairman KILDEE. Mrs. Roukema.

Mrs. ROUKEMA. Thank you, Mr. Chairman and Mr. Secretary. I welcome you here today and we had a very fruitful discussion the other day, although you were not able to allay my concerns and fears. And at the risk of repeating things to you, I do want the committee to know of my concerns.

And I must confess to this audience today I find myself in a difficult and uncomfortable position being a person who all my life has been a strong friend of public education, I do not like to be sitting here critically and obdurately saying, Mr. Secretary, I do not think you are going to win me over on this.

But let me explain to you my problem here. I have been a teacher of public schools, I have been an elected member of a school board and I have served on this committee for 12 years, and I also suffer the luxury of coming from a State like New Jersey where we had a wonderful education governor whom I think you know, Tom Keane, and he is a nationally renowned authority on improving accountability in education. He did that for New Jersey and I think that is what you are trying to do for the country.

But let me tell you my problem. I certainly support the block grant and incentive program, but it seems to me the more I hear both in response to the questions of my ranking member, Mr. Goodling, when he pointed out quite candidly, and I think correctly, that if these communities had the money to do these things they would probably do them, including his references to the opportunity to learn standards.

Mr. Sawyer expressed some of our own divisions in thinking here when he spoke about consortium regionalization, but not my State.

Let me be direct and I want you to answer, if you will. I am absolutely convinced, although it is not your intention, but I am absolutely convinced that the so-called voluntary national system of skills standards combined with the opportunity to learn standards will inevitably, like night follows day, lead to a national curricula, to which I am unalterably opposed and, even more directly, to funding standards, national funding standards that have all kinds of implications, not just budgetary implications, but equalization implications.

I have a problem with this. I want to improve our schools. I want to set higher standards. I would like to think that we can go the traditional block grant incentive approach without this massive overlay that may or may not be bureaucratic but, more important-

ly, may be a straightjacket for school systems and negate the historic State relationship that we have to education.

Mr. RILEY. I thank you very much and, as you and I discussed some of these issues the other day, I understand your concerns. Though the voluntary nature of the connection is very pronounced all through this, I understand that you are saying that at some point in time that might change.

Of course, my argument to that is that there is no way for us to be able to reach for world class standards for a school district in your State unless they had the wherewithal to do major, massive things like figuring out what content standards should be in terms of math for the eighth grade. That kind of thing.

I really think—I don't care how far you go in support of the State role—that there is a very clear national role of determining what these kinds of world-class standards should be for content, for performance, and for the opportunity to learn and occupational standards. I just think that, and that is what this really does is develop that information and then from that you have the other forces out there that build to that information.

Yes, you can have leadership, you can have help, you can have facilitation, but I do not think that we should absolve ourselves from taking that major role to try to build an educational attention nationally in light of that.

Mrs. ROUKEMA. Well, I hear the reference to voluntary but a national skills standards board by definition, I believe, goes far beyond setting voluntary standards.

But we will have to—we will not resolve this here today. Maybe we will never resolve it, but I would like to keep the conversation going.

Thank you, Mr. Secretary.

Mr. RILEY. Thank you very much.

Chairman KILDEE. Mr. Reed.

Mr. REED. Thank you, Mr. Chairman. I too want to join in the uniform chorus of praise to the Secretary who brings to this endeavor great experience and wisdom. He has been most helpful and cooperative in dealing with this issue to date. We have had some discussions on the legislation and I suspect we will have some more.

I have just one general question, Mr. Secretary, and that is as we embark on this process which includes a lot of emphasis on state-wide planning for educational reform, does the department have a recent up-to-date assessment of local efforts to date with respect to educational planning and educational reform?

This approach might be a welcome addition to State efforts, but if significant efforts have already been undertaken at that State level for these comprehensive plans, if they have a sense of where they are going, where they want to go, then perhaps we can think of other Federal roles in this great debate about educational reform.

Mr. RILEY. Well, I think, Congressman, if you analyzed what is out there now you would see every State is different in terms of what they have done and where they are. In every school district and every school, and I am sure there is an awful lot of State information about those kinds of issues but nothing like the kinds of

stimulation that we think this kind of attention would give to those issues.

And by having decisionmakers on the local level deal with teaching and learning, deal with all children, we think that that kind of energy will be very helpful.

As you might point out, you can find a school district here that might have done 50 percent of this kind of analysis in trying to respond to it. You might find one 95 percent and some hardly any.

So I think that the main thing is that we energize the whole system and really make it kind of a national interest for every State to be involved in better teaching, better learning.

Mr. REED. Mr. Secretary, if you could summarize whatever information you have available on State efforts and would forward it to me, I would greatly appreciate it.

Mr. RILEY. I will do that. I surely will. Thank you.

Mr. REED. Thank you.

Chairman KILDEE. Mr. Miller.

Mr. MILLER of California. Thank you, Mr. Chairman. Mr. Secretary, thank you for being here and thank you for all of your help and your work and your time spent with members of this committee on this legislation.

After spending 10 years working with you on children and family issues, I really believe that your service in this position is really one of the great contributions of the Clinton administration to national policy. I think you are going to be a tremendous, tremendous Secretary.

The questions that were asked by our colleagues on the other side of the aisle, if you will, are in a sense the same questions I have, but I come at them from the other side of the issue.

I think you have done a very, very credible job in integrating the opportunity to learn standards into this legislation; however, I must tell you I still continue to be concerned about them.

We have learned in our studies of children over the last 10 or 15 years that they are capable of much more than we ask of them. From infants to adolescents throughout entire youth experience, children have tremendous capabilities. The question is do we always extract the best in our handling of them and our nurturing of those children.

By the same token, as we seek to send every child to school ready to learn, I am terribly concerned about the issue whether we have every school ready to teach. I do not understand the hostility on the other side of the aisle to this issue.

We know that people make decisions about buying their houses, about changing jobs, and about the communities that they will live in based upon the education they think their children may receive. Houses are assessed differently and patterns in communities change because of schools. It is, I think, the first or second criteria that people use in a decision to make that investment to locate, to put down their roots.

I just think there is, if you will, a consumer right to know about the effort that the State and the local districts are making. I think you raise that issue and I think Mr. Gunderson asked you that question. You ask for a timetable, you ferret it out, and I commend you for that because I think that is an important part.

We are continuously asking ourselves not only in this legislation but also in the discussion of education reform about the effort that our children will make. There is very little evidence that children will not make the effort if the challenge is put to them and the resources are made available. We see it time and again in every pilot program and individual effort at looking at children.

I think the children have a right to ask what is the effort that their community is prepared to make on their behalf.

Because I must tell you—we all know this, and I guess I am entering that age bracket where you say it more often than not—the resources that are available to young children today in most schools are not comparable to what my parents and grandparents were prepared to make available to me.

There is a generational slighting here of our young children. I think that while we cannot steer this ship of public education because our control and our funding is so small, and although I think you and President Clinton represent a view of governors who are stronger advocates than we have had for a long time, we do have an obligation to ask the question of what is the effort that this Nation is really, in fact, prepared to make on behalf of educating the Nation's children.

You led the Southern Governors group. We have got to ask that question because it is not fair to this generation of children. I tour schools in my district where the rain is coming through the ceiling, where teachers are not certified, trained or credentialed in the subjects in which they are teaching, where modern technology is not available, where textbooks talk about a world that no longer exists, whether it is geography or mathematics or space travel or job occupations.

We have got to address that. I think this legislation starts to make people accountable. But I can no longer sit here and listen to leader after leader, especially at the State level and in the legislatures, talk about the importance of education and then continue to cut the resources to education. Let us believe that we are going to have a world class education system, especially on your terms, which are most important: that every child has the capability of achieving those goals and achieving that knowledge to make them productive and participants in this democratic society.

I just do not want to leave the notion that this is not an important part of the debate. I commend you. You have come a long way and I appreciate the controversy in this debate. But parents and children have a right to know the effort that we are prepared to make or are not making, so that they can make those decisions about their children's education.

Every parent wants those goals. Every parent wants to see that their child passes the assessments and is achieving those goals. That is what we want for our children. But we have got to know whether or not we have put them into a system that can deliver that.

It is the fundamental issue here. I really want to commend you and thank you for not only this effort but for what you have done on behalf of children and families and families at risk in your entire public service to this country.

Mr. RILEY. Well, I thank you so much, Congressman, and I thank you for your years of service for children and children's health and education and other issues. I go to bed every night concerned about the very things you talk about and I think all of us are interested in trying to bring about a condition of education where all children have the best opportunity possible.

We are in this situation here, obviously, where Constitutionally and legally and from a process standpoint the States really share the chief responsibility. I believe that is a good system. I believe it brings out lots of creative, innovative energy out there that really is capable of working.

I do think we can play a major role. It is my judgment, and I have worked with the President and with the administration people in the White House to try to develop a balance in this measure, that we can best impact that system within the structure of how education is handled in this country.

And I understand the debate from the two sides and I am here in the middle, but I tell you the debate is healthy, and it is good that we as policymakers and decisionmakers in this country are gathered here in this free speech arena to say what we feel and think about education and how we can best serve the children of this country.

Chairman KILDEE. I thank you very much. Mrs. Unsoeld.

Mrs. UNSOELD. Thank you, Mr. Chairman. And I would like to align myself with the remarks that have been made today, Secretary Riley, about our appreciation of the cooperation and the working together that is taking place between your Department and our committee.

I would like to follow up on the question that Congressman Reed asked. In Washington State, we have gone a fair distance in establishing student learning goals and in working on the establishment of a performance-based assessment system.

How is this and what other States have already done going to mesh with what you are attempting to do?

Mr. RILEY. That is the interesting thing about the way that Goals 2000 would deal with the varying conditions and situations throughout the country, and you do have certain States that have gone great distances and really have very outstanding efforts in certain areas and they would be picked up where they are. They might have weaknesses in other areas that need to be implemented, but the systemic approach looks at everything. I mean it looks at curriculum and it looks at textbooks and it looks at teacher training and so forth, as we have talked about.

And if a State is further along, then it would pick it up right there and keep moving—there is no stopping place for anybody, any State. I do not care how far they have gone or how far they have not gone, there are miles to go.

And so we have attempted to devise this to then get into this conversation with the States, a partnership which I think is very exciting. We are going to be involved in stimulating this kind of energy, picking it up where it is and moving it forward.

Mrs. UNSOELD. Mr. Secretary, I would like to ask about what part, what role, parents can play in school reform, and how we can get them more involved.

How is this treated in Goals 2000, and what should we do to go beyond getting the cooperation of parents? Can get them more involved? What about those children who have parents that just don't care?

Mr. RILEY. Well, you know President Clinton has talked over the last months about an ethic of learning and I have heard him say that if there was some way that we could have in poor parents this ethic of learning where they simply imparted to their children how very, very important it is for them to get a good education if they are to escape a condition of poverty which, as you know, presses down on health and education and everything else.

This measure puts all of that on the table. It causes States and school districts and schools to deal with the issue of parents and parent involvement in every school that is out there and, as you know, in some places a lot is going on and other places very little.

It is part of this in terms of the plans and the development of where they are going in the various schools. It is specified as being part of it, and will get things moving to where other poor parents are seeing what is accomplished by their counterparts in other sections of the country, where they are coming together and meeting in the school and working with teachers and interested in all of the community problems such as drugs or violence or poverty.

I think this could play a great role in bringing out that kind of involvement across this country.

Mrs. UNSOELD. My time is just about up but given that the first national education goal focuses on preschool children, what effect is your bill going to have on early childhood education?

Mr. RILEY. It is also, of course, part of the plan for the State and the local district to deal with and for them to come up with their ideas and concepts of it. As you know, Head Start and WIC and many of those things that impact early childhood education are in HHS or Agriculture or other departments.

We are working very closely with those other departments to see that those lines are blurred in terms of how we handle young children in preparing them for school. There is language in here also that encourages coordination between agencies that deal with students and their problems and their preschool and postschool problems.

So that also, in a look at what we are going to do in a particular school district, that would be an issue that we would look at.

Mrs. UNSOELD. Thank you, Mr. Secretary, and thank you, Mr. Chairman.

Chairman KILDEE. Thank you very much. I want to point out that not for any personal reasons or philosophical reasons, but because of a scheduling reason, the Republicans have left for a prior scheduled meeting and they will return.

Mr. RILEY. Thank you, sir. I am glad you pointed that out, Mr. Chairman. I didn't know if I was doing well or poorly with them.

Chairman KILDEE. Ms. English.

Ms. ENGLISH. Thank you, Mr. Chairman and Mr. Secretary, thanks very much for being here today. I have two questions and I will ask them both and then let you use the allotted time to answer them.

The first is in regard to the BIA Indian education program's involvement in the reform effort. I do appreciate the increased funding, but the bill does not really go into much detail as to how the BIA Indian education program will parallel the reform package that is being developed. Is it based only upon an agreement between yourself and Secretary Babbett?

How do you envision that agreement to be and do you think that there could be the potential for adding more work detailed language in the bill? The BIA program incorporates 182 schools and 44,000 students, and I think that is a significant number of students. They should be part of this education reform initiative.

My second question is what do you believe will happen to the States' commitments? As we continue down this road toward reform and the Federal Government increases our long overdue commitment, I think there will be temptations for States who do not have the same vision for education or financial commitments to education to decrease their own commitment, both financially and in accountability. These States will start pointing to the Federal Government as being responsible for the failure of education reform. If it fails they will say it was the Federal Government's problem.

How do we ensure that the States' commitments will correlate with and match the Federal Government's commitment to funding resources and education reform?

Mr. RILEY. Thank you very much. The bill provides, as you point out, that the Native American issue is handled through, of course, the Department of Interior and it is handled much like a particular State would be handled with separate funding provided and that then would have to be arrived at with some arrangement with the Department of Interior.

We felt like that with the federally operated school system, and it is sizable. It is something about which I have interest and concern and I have talked with Secretary Babbett some about that issue and we plan to talk a lot more.

But it is our feeling that would be, from a process standpoint, the best way to handle these federally operated school systems and we did give it special attention and special funding. I would welcome any ideas or suggestions that you might have along the way, but we will see that it is handled certainly equally with every other State as they are handled.

The other question dealing with whether or not this would in some way reduce a State, I guess, or local school district commitment or support for education accountability, I would hope would be just the opposite of the impact of this measure.

We will be elevating high standards and getting the American people in every State interested in improvement.

And it is my feeling that the calls for accountability and for the analysis of results will mean more attention to what is done in the States and the local school districts with those resources that are there.

Chairman KILDEE. Thank you very much. Ms. Woolsey.

Ms. WOOLSEY. Thank you, Mr. Chairman. I want to join you and the rest of my colleagues in welcoming you back here, Secretary Riley.

Mr. RILEY. Thank you.

Ms. WOOLSEY. Thank you for being so generous with your time and your expertise. You make me thankful that I am on this very important committee. Your enthusiasm and your interest is very, very true and so helpful to us.

I know I am going to sound like a broken record because I am going to talk again about looking at coordinated services and the whole child, the entire student. It pleases me greatly that the Goals 2000 program includes language setting the stage for coordinating services because, as we all know, I have been talking about the need for every child going to school healthy, well-nourished, and ready to learn. Once that child is at school I would like to see support services made available to enable that child to become well-educated.

In other words, I believe we must begin to take the whole child into account, which means not only having bright, articulate, well-trained teachers, but also having students that are ready to learn.

So that leads me to my major question. Do you, Secretary Riley, believe that this program as we have laid it out now is considering the full student? Will it be promoting coordinated services as a priority and how will we encourage the States to prepare programs to cover the entire child, the entire student?

Mr. RILEY. Well, the answer is yes. In my judgment, the bill will certainly do that. It is intended to do that. I think that we on the Federal Government level can begin, as I have discussed earlier, not by looking at things in separate categories but by trying to look at how they all come together.

If you have a child that is impacted by certain Federal programs, and it might be two or three different programs with all the associated complications, we do have provisions in here that allow the school to request a waiver to handle that. It is a rather limited waiver process in some ways, but it is certainly new ground to enable a local school or local school district to come to us and request that the whole child be looked at and not just in categories.

Then when we go to the State and then the State to the school districts. With these action improvement plans we provide very clearly that one of the things that they have to show in the parental and community support involvement section is that they focus on public and private community resources, school resources, prevention, early intervention, the kinds of things that you have talked to me about before, that the students are holistically—needs are holistically attended to. Those things then the State is required to address in their action plans.

Ms. WOOLSEY. Thank you. I have one more question and this follows up on a press conference that the Congressional Caucus for Womens Issues and our Chairman, Dale Kildee, had yesterday to support gender equity in schools.

I would like to know how these provisions fit into Goals 2000: Educate America Act, both in the classroom and on the goals panels and the councils. Are we looking at gender equity and diversity?

Mr. RILEY. Well, we certainly are and, of course, we strongly stress that we are talking about all children and we make it very clear that there is no difference between any child, and that we are

concerned about the education of all children equally and across the board.

All through here I think the whole tenor of this measure certainly makes the statement that we are interested in quality and equality.

Ms. WOOLSEY. I appreciate that. I think we might want to look at some language that talks about bridging the gaps that have—I mean there are different programs that are going to be needed that will bring young women and girls up to par in the first place.

Mr. RILEY. Fine. We will be happy to have those conversations.

Ms. WOOLSEY. Thank you.

Chairman KILDEE. Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman. Mr. Secretary, I appreciate the chance to be here. You can tell either I was late or I am one of the freshmen and I am far down the list.

During my many years as a State legislator, and a lot of us on the committee, particularly new members, have the background that you have in dealing with education on a State level.

The decision how to best educate our children is one that has been around for I know the many years I have been there. In fact, in Texas we were fighting equalization in the late 1940s.

I have seen lots of issues come up on educational reform and they are hot one year and then a few years later we see that they are not really that effective, and I hope that this bill in the willingness of the administration that I have seen in the last few weeks to work with us on the bill is a new course for education. It will not be just a hot idea for 1993 and we will forget about it in 1995.

The willingness of the administration to work with the committee, and even though I am proud to be a cosponsor of the bill, obviously we still have some disagreements and I think it is mainly we would like to see some improvement in it.

I think just like you said in your opening remarks this is a first step that we can deal with it, and with that I have some questions I would like to ask you.

The first one is that I noticed under the bill on page 40 you are using the current Chapter One formula. Is that because we have not rewritten the Chapter One formula? There is not an intent to actually use an old formula instead of whatever may come out of this committee and the full committee during this session of Congress?

Mr. RILEY. This will change when the formula changes.

Mr. GREEN. One of the other concerns I had was created in some of the members of the panel and on page 11, and I know this is probably discussed because we discussed it between members, that you have five members of the opposite political party on the goals panel.

Now, I have served with lots of governors in Texas: some good and some not so good and some who put education at a priority—I think we shared that at one earlier meeting—and some who just because they happen to be governor they did not care about education except they knew it cost too much.

My concern is by saying that putting five members as the non-Presidential party are we just filling slots or are we going to actually pick out? Now, there are governors, and being a Democrat

there are Republican governors who are far-thinking on education but there are some just like there are some Democratic governors and, hopefully and God forbid we don't lose control of the White House in 1996, that there are some Democratic governors who may not be as reflective of educational reform or educational initiatives.

I understand the bipartisanship and that is what we are aiming for but I also hope we are not setting ourselves up for failure by just filling slots with nonPresidential party governors.

Mr. RILEY. Well, you and I have had some discussion on that, Congressman. I understand the points you make about the goals panel and I think you fully realize that with the Constitutional responsibility of States and the feeling of all the governors coming together, with President Bush then coming in, and with Bill Clinton being in the middle of that, we sincerely felt, and the President does, that this is the proper way to proceed.

And that is to take basically the structure of the Goals Panel, which is bipartisan, and to take the basic goals, national goals which were a consensus of the 50 governors and the President, and, basically move that forward.

There is some slight adjustments to it. As you know, State legislators have been added and then we, of course, added foreign language and arts to the basic competencies in the goals themselves and listed the objectives also.

So I would hope that you would be sympathetic to the history of that and the fact that all of us, and I really think all of us, ought to work for bipartisanship in terms of education and I think that is important. We come from different political postures, obviously, but it is better for children if we can be bipartisan in that effort.

Sometimes you can try so hard to be bipartisan you get partisan about being bipartisan and I hope we avoid that. But I do think we inherit this structure and this history that I would urge you to be sensitive to and to help us build from there.

Mr. GREEN. Do the best we can but, again, some of us came not from the national governors conference, the national legislative conference in recognizing that.

One last question in the brief time I have. The five members representing business and industry, and I think that is good because I think all of us from States realize that you have to involve business and industry ultimately to be effective.

The concern I have was that sometimes we have seen testing industry people placed on there and with the conflict of interest that you all envision—I see you shaking your head, Mike, that's fine—we will actually have business leaders that, obviously, some might disagree with on many cases but I think our goal is adequate education without testing industry leaders.

Mr. RILEY. That's right.

Mr. GREEN. Thank goodness for all our staff. I understand. Thank you, Mr. Secretary.

Mr. RILEY. Thank you.

Chairman KILDEE. The Governor Romero-Barcelo. By the way, did you two serve in the governors conference at the same time?

Mr. RILEY. Yes, we sure did. He helped me through.

Chairman KILDEE. Very good.

Mr. ROMERO-BARCELO. Thank you, Mr. Chairman. Mr. Secretary. I want to congratulate you and your staff and the people who work with you on the extraordinary job that you did in such a short time in putting together this Goals 2000 bill.

I would also like to recognize the fact that the dedication to education—I know it's been a while since we served together as governors in the southern governors conference. Because of your success in South Carolina I think that we are fortunate to have you as our Secretary of Education at these times when we need to make some significant inroads in early education.

However, when I was a child and teenager, to be educated in the United States was—none was better. I mean you couldn't get a better education and now all of a sudden we have fallen behind quite a few other developed countries throughout the world and, see, that is being addressed in these Goals 2000.

We want to not only have a good education in our Nation but also have the best education in the world as we did before. I think that if anybody can get us on the road to that, you will.

I wanted to make two points in this about the problem just—I see that they are addressed but I would like to see more concern with those two issues because whatever we do to improve education, whatever goals and standards set, they will never be reached unless we have good principals.

My experience as a governor is that the principal is the core, the most important thing that you can have in a school. Of course, the teachers are necessary and indispensable as they are the ones that teach the students directly, but the principal is the one that puts the school together where he establishes whether it is going to be a disciplined, orderly school, and whether there is going to be motivation throughout in the school.

And I have seen that in extraordinary examples of how a school that was—the name of the school is Republic of Colombia and it was at that time just like the Republic of Colombia with drug problems. There were drug problems, there had been shootings, and we identified one of the principals in Puerto Rico and we went into that school and in 2 years he did an incredible, extraordinary—he turned around that whole school and people were motivated, the parents were involved in the process, teachers, the students. I went to a graduation and I had the—saw the students giving diplomas to the parents.

I have seen that addressed and I see that in your section 306(C)(6) taking from the plans talk about the improvement for the teachers and the principals and also sometimes with the States also mentioned, but I would like to see a little bit more recognition so the principals themselves feel they recognize their importance and the whole system recognizes that importance because I feel that without a good principal no matter what we do we will not get anywhere.

The other issue that I see that you have addressed also, and I am very happy to see it, is a safe, disciplined, and drug-free school, which says you want a school free of drugs and violence and that it will offer a disciplined environment conducive to learning.

There is one problem in having a disciplined school and that is the attitude of some of the courts. Perhaps we need some kind of

right of students to learn and to a safe and quiet environment, something spelled out by law that will allow us to keep the court sometimes out of the disciplining process except in occasions where abuses are committed.

But when the principal dismisses a student because they are too disruptive and there is evidence about sometimes the school—the courts turn over that—those decisions and they intervene in the process and that immediately demoralizes the whole disciplining process in the school.

Unless we have that in the schools and in the inner city schools and the courts it will be impossible to have schools without discipline and without the proper environment. We should address that in the bill or in the—I don't know what your thoughts are about that and that is what I would like to hear.

Thank you.

Mr. RILEY. Thank you so much, Congressman. The issue of principals is exactly right and I was in Boston the other day at a small inner city school and a very, very competent principal and I went into a classroom that was integrated, in terms of levels of capacity of first and second grade level kids, and saw a teacher and an aide just in a masterful way working these kids and their education, with a little black boy helping a little disabled white girl with her work, and seeing the kind of things that happened.

But this umbrella that a principal developed was very, very impressive. And we do, as you point out, include principals in here as we talk about what the States and the local school districts should be dealing with and I would certainly pay close attention to what you say and we can take a look at further things such as safe schools and disciplined schools. As was said earlier, you just do not have good education if you do not have well-disciplined, safe schools free from drugs, and anything any of us can do to help that I would certainly be interested in it.

Mr. ROMERO-BARCELO. Just to give an example, one of the top preparatory schools in New England—I am not going to mention the school but I went to visit recently on alumni day. It used to be a boys-only school. Now it is co-ed and there is a headmistress and she was talking a lot about the drug problem and she said that if a student was caught with drugs he would be suspended and if after he went through the process of rehabilitation he would be open for admissions again.

But, however, there are other instances where a student has been caught—had been drinking and he had been boisterous with another group and thrown—somebody had thrown snow and broken a window, but those students were all dismissed and they would never consider taking them back.

I thought that the values were so turned around because the other thing is what students usually have gone through. Many people in this room have been involved in something like that and they were not really problem children. They just got carried away in the one instance; whereas, the drug user has the more serious problem.

I don't know how I can deal with these things but when you can tell the top schools are turning the values around like this and

giving more support to drug users than somebody who drinks occasionally, there is something really wrong.

Mr. RILEY. Those are very, very difficult issues, the same kinds of issues that principals and school people have to deal with across the board and the courts. What is very serious to some person in one area is not that serious to another, but certain things we know are serious. We know violence is serious and we know drugs are serious and we cannot have them in the schools.

Mr. FORD. Would the gentleman yield to me?

Mr. ROMERO-BARCELO. Yes, of course.

Mr. FORD. What you have done is just put your finger right on one of the continuing irritations in this country. The people in my age group say, "By God, if a kid did the kind of things that kids are doing in school, in my day they would throw them out." And they are right and in those days we graduated 25 percent of the 18-year-olds in this country from high school.

We threw out all of the troublemakers before they got too far along, but we changed in this country. We came along and said you can't do that. You gave two examples there where arbitrarily a private school can decide to throw out one group and rehabilitate the other group.

That is the secret of the private school—that is how they maintain better discipline. That is how they maintain a more homogeneous population, other things of the kind which some people think are desirable.

That is the way the public schools in this country operated for many years, probably 200 years, but the courts in interpreting the Constitution have said now very clearly. I don't believe there is a State that would permit the public schools to throw either group that you were talking about permanently out of school. They wouldn't let them do it. The parents would walk right down the street to the Federal courthouse and there would be a Fourteenth Amendment case filed and they would be right back in school.

Things have changed and they never mentioned publicly the great secret that the private schools have is the ability to boot out their problems and send them back to the public schools.

Thank you.

Chairman KILDEE. Major Owens.

Mr. OWENS. Mr. Secretary, I will try to be brief and I will try not to be redundant. I appreciate the fact that you have personally been involved in maximizing the dialogue with us on the preparation of this bill and you know my concerns about the school delivery standards or the opportunity to learn provisions in the bill.

I think the time has come for us to give you the opportunity to lead and you know how we feel about it. We have given our recommendations and now the buck stops with you. We will follow your lead.

I only just want a word of caution. The great emphasis here on the States and having reform come from the bottom up, I understand, and I think it should come primarily from the bottom up, but we need to make certain that the top is very active in this process because unlike any other industrialized nation and those that are competitive with us we leave already most of our education to the State and local level. The difference between the sys-

tems and the performance of the systems might have something to do with the fact that education in all the other industrialized societies is more centralized.

I do not want to go to the extremes that some of them go to, but I think we have to have a greater role for the Federal Government. It must not be a trivial role, it must not be an auxiliary role, it must be a serious role, which leads me to my question.

The States have gotten into a habit of not being—they have not been monitored the last 12 years. We had a government, an administration in place which felt defense was the only thing important and everything else—there was not much serious monitoring of what was going on.

If you ever get around to it and can get a handle on what is going on with Federal programs that are funded already, you will find that you won't recognize some of them and what the money is being spent for. You won't recognize the great amount of contempt there is out there for Federal laws and mandates.

There is a serious situation out there with respect to budget cuts. People are very cynical and we find situations and we have all been in bureaucracies. You find situations where the Federal reform money is coming in, and you might find a person who all his life has been working on school transportation and he is an expert in school transportation being put in charge of curriculum development because that is where the money is and he has the seniority and ridiculous things flow from that in terms of decision-making.

So my question is are we going to be able to really provide some reasonable monitoring of what is going on and see to it that this bill, provisions of the bill, are taken seriously by the States?

There have been cutbacks in your staff and I think some more predicted. Will you be able to provide the kind of coverage staff-wise to see to it that reasonable amounts of compliance are taking place?

I hate to use the word compliance because we are all in this together, but experience leads me to believe that unless there is some serious monitoring we are not going to recognize in 5 years what you are attempting to legislate today.

Mr. RILEY. Congressman, that is really a profound question about the cynicism out there, the strain on the budgets and how it is impacting different areas in different ways and causing some irrational decisions to be made that impact poorly on children.

And I would say that the cynicism has got to be dealt with in a real way. It is my feeling that the high standards and goals—where the public can look at them, see what they are, and see that we are moving things in that direction—we will begin to build up support among all people in a bipartisan way, a pro-children way, for getting children educated for the future.

I think that is going to happen and I think that in this bill we have attempted to. The President feels that with this kind of partnership with the States we are not trying in any way to federalize education or create a Federal curriculum. None of that is part of this.

It is a new role and it is going to be different for people to deal with. It is a partnership role. We think in terms of programmatic

involvement. We see a problem and we have a program to deal with the problem.

This is a partnership where the relationship will be ongoing. They will have in the various States a 1-year plan and then they will have a 2 or 3-year plan and all of that will be looked at to see that all children are being dealt with and how they are being dealt with and what is happening.

This relationship, I think, will work.

As you say, there is some risk in the President coming forward with this proposal. There has been a lot of work and a lot of talk in this same area but we think this is the way to go to get overall improvement.

Mr. OWENS. Thank you.

Chairman KILDEE. Mr. Strickland.

Mr. STRICKLAND. Thank you for being here. I have a couple of concerns about assessments and I will talk to your staff about that in private. I am also concerned because I come from a large rural area and because those areas sometimes are underrepresented in Congress and in policy decisions, I would like to talk about those issues as well.

But what I would like to do is just make a statement and then ask you I think what may be a different kind of question than those that you have received thus far.

Since I have been in Congress, and I have been here 3½ months, I have noticed a real disconnect between rhetoric and action and I think that has certainly been true in this country in the area of education, and everyone is an education something—governor, president, congressman, whatever.

But it is my sense that at this time in this country there is a certain zeitgeist, there is a certain spirit of the times that is upon us that makes it possible to do something very significant.

And as I have listened to members of the other party as well as members of my own party address you personally, I perceive that there is a great deal of goodwill that is focused toward you and that you in some way represent perhaps an opportunity to bring this spirit of the times to fruition and that we can work together in a civilized manner to accomplish some good things.

On a personal level, the prison at Lucasville is 1 mile from my home. I can sit in my living room and look out the window. I knew inmates who were killed, I knew officers who were held hostage. And what does that have to do with education and what we are talking about? I will tell you what.

In the 6 years that I have worked there I don't know that I have met three or four inmates out of the hundreds that I have worked with who have had a healthy education, who had a healthy upbringing; many don't know how to read and write. Certainly they have no meaningful job skills.

They cannot effectively participate in society as you and I experience it and so I am concerned that the fabric of our society is disintegrating. I am glad the President is talking about an education ethic. I think that is incredibly important. I think it may be the hope of our survival.

Without trying to overstate the case, as you lead us and as you provide a model for the rest of us and as you listen to these ques-

tions from each of us, I am wondering in your heart of hearts, not in an academic sense but in your heart of hearts, what is of greatest concern to you as the Secretary of Education as you contemplate the task that lies before us?

Could you speak to that, please?

Mr. RILEY. Well, that would call for a question I had one time to deal with in a paper and for a presentation. A friend of mine who was a former chaplain at my university died, and there is a program that they have once a year. They invite somebody to speak to what really matters. It has to be the same topic every year and that doesn't sound too difficult but you start to write that down and it gets very, very difficult.

It would be my hope that we all, first of all, realize that every child in this country can learn—every child who has high expectations of themselves and who has high expectations from their parents, their people who are concerned about them, their friends, their teachers, their principal or superintendents, we have a great obligation in this country.

We have this federalism that makes it somewhat more difficult for us to grasp than it is in other countries and we have a very diverse population which is, I think, a blessing but which also makes it very difficult. You know, difficult things are often the better things.

I think that it is so terribly important for the future of our country that every single child have the very best opportunity to have a strong education with high standards, with this feeling of importance, with this feeling of I can do it, and with the parents, teachers and all working together with those of us in government providing every single opportunity that we can provide.

The President's concept of responsibility and opportunity, I think, is a great thing to ingrain upon the young people and those of us in the Federal Government that can provide leadership. We can provide direction, we can provide help and support for the States to see that these things come about.

Mr. STRICKLAND. Thank you.

Chairman KILDEE. Thank you very much. Unless there is additional questions—yes, Mr. Gunderson.

Mr. GUNDERSON. Thank you very much, and I will try to be quick, Mr. Secretary. Actually, three questions in particular.

In last year's bill we included a provision which allowed one or more LEAs to go together and apply for the school reform money. I have a number of situations in my district where two or three schools within a county—they have recognized that they all literally serve and prepare people for the same workplace and they wanted to do their educational reform on a cooperative basis.

Would you have any objection to that kind of concept?

Mr. RILEY. I don't think I could think of any objection whatsoever, Congressman. I think that is a fine idea. We do have language in here that clearly encourages consortia working together in a number of areas but, as far as that is concerned, I think that would be totally consistent.

Mr. GUNDERSON. Good. As long as we're agreeing on things, I am going to bring up—

Mr. RILEY. Maybe we ought to stop. I don't know.

Mr. GUNDERSON. I want to bring up the issue of flexibility because, as you can imagine, to some of us on this side it is a very important issue.

On page 65 of the working draft, getting down to line 18, it says that the Secretary can approve requests for flexibility waivers if and only to the extent the Secretary determines that such requirement impedes the ability of the State or the LEA to carry out the State or local educational improvement plan.

The concern I have about that language is that you and I both know the majority of schools or LEAs in this country are going to be able to meet those State or national plans and those State or national improvement plans.

So you could make the case legally that you as the Secretary would have no ability to ever give any school a flexibility waiver because if the only basis is that it impedes the ability to carry out the improvement plan you could say, "Look, I have 2,000 other schools who are meeting the educational plan without flexibility waiver so there is no basis for which I can grant you that waiver."

Would you be willing to work with us and get a little bit different language in that area?

Mr. RILEY. Well, I would certainly be more than willing to think about that. The waiver aspect, I think, is very important. It is a real good message, for one thing, that what we are interested in are things working well and not just programmatic categories that then make it difficult for a local school, and these would generally be local problems that they are trying to deal with.

And so we favor that, but we put the language in there to point back to the carrying out of the improvement plan; in other words, it has to be associated with the carrying out of the education improvement plan, and you know the language we would certainly be happy to look at in terms of that.

Mr. GUNDERSON. One final question. What, in your opinion, is the difference between national content standards and national curricula standards?

Mr. RILEY. My advisor tells me there are not national curriculum standards, but that wasn't the question.

Mr. GUNDERSON. Did you advise your advisor the other side of the question?

Mr. RILEY. He gave me a good answer but it was to the wrong question.

And I know what my concept of national content standards are and how they are arrived at. I know that curriculum then developed through frameworks on the State level would be driven hopefully by voluntary high national standards that the State could look to.

It is illegal for us to have a national curriculum, as you know, and we don't favor that. But we think it is very important to have world class national content standards. Curriculum is the course of study. Content, as I see it, is what a person should know and be able to do.

Mr. GUNDERSON. Perhaps what we need is a definition inserted within the language someplace of content standards. As I read that section, I don't think we defined national content standards any place and I think to your credit I think you are trying to make

sure nobody interprets that as curricula standards and I think the best way to do that is to positively define it for whatever it is.

Mr. RILEY. Well, we can certainly take a look at that.

Mr. GUNDERSON. Thank you very much. Thank you, Mr. Chairman.

Chairman KILDEE. Thank you. Do you have any closing comments you would like to make, Mr. Secretary?

Mr. RILEY. Mr. Chairman, I don't think so. I thank you and the committee for the time and the interest and I really do think the questions and the comments were all of a high level and indicate to me that both sides of the aisle of your subcommittee clearly are interested in improving education and that is what we are interested in.

Chairman KILDEE. Well, I think you say it quite well. First of all, we want to thank you for appearing this morning. I think that you have helped draw members of this committee of both parties closer together. Some hearings are divisive and some have the opposite effect and I think you have been very helpful in drawing members of the committee, including members of both parties, closer together and that is a very significant contribution.

And I know on both sides of the aisle we look forward to working with you because we have some real needs in education in this country, and you are the number one Federal educator appointed by the President. We have two major bills this year we need to work on, this bill and the Elementary and Secondary Education Act.

Hopefully, as we did so well 28 years ago, 1965, with the initial enactment of that bill that we will look forward 28 years now and see how we can really affect the quality of education in this country with both this reform bill and the ESEA bill.

Thank you very much for your appearance here this morning.

Mr. RILEY. Thank you, Mr. Chairman.

[Whereupon, at 12:20 p.m, the hearing was adjourned, subject to the call of the Chair.]

[Additional material submitted for the record follows:]

STATEMENT OF HON. TIM ROEMER, A REPRESENTATIVE IN CONGRESS FROM THE STATE
OF INDIANA

Mr. Chairman. Since I began my service in the House of Representatives, it has always been a pleasure and an honor to serve on your subcommittee. I am particularly pleased and excited to be here this morning as we welcome Secretary Riley to discuss "Goals 2000: Educate America," President Clinton's school reform bill.

Mr. Secretary, you demonstrated your expertise at reforming education during your tenure as Governor of South Carolina. You built coalitions to fight for education and insisted that schools set goals for students. You then set out to ensure that schools had the resources to help students meet those goals. We are all well aware of similar school reform efforts in Arkansas under the leadership of President Clinton. It is my hope that we, as Federal legislators, can mirror these efforts and prompt genuine reform within the other 48 States.

I view "Goals 2000" as the first shot across the bow in a battle for our Nation's schools. We have a unique and critical opportunity to establish a framework in which our Nation's students can thrive and truly be the best educated children in the world. I am confident that under your leadership "Goals 2000" will be the first of many steps in that direction.

I look forward to working with you and the President on this bill, as well as the Reauthorization of the Elementary and Secondary Education Act and other initiatives.

STATEMENT OF THOMAS J. O'TOOLE, EdD, PRESIDENT, THE AMERICAN SPEECH-
LANGUAGE-HEARING ASSOCIATION

The American Speech-Language-Hearing Association [ASHA] represents over 70,000 speech-language pathologists and audiologists nationwide. Nearly half of ASHA's members are employed in educational settings and in large part serve students with communication impairments under the Individuals with Disabilities Education Act. ASHA members have a long and outstanding history of contributing in the areas of education and special education through services, research, training, and professional standards.

ASHA supports improving educational opportunities for all students, including students with disabilities through school reform efforts. Over the years, programs for students with disabilities have made significant gains in providing quality services in all schools, particularly in those programs that promote the provisions of the least restrictive environments. The inclusion of students with disabilities in Goals 2000: Educate America Act solidifies the statement that students with disabilities are an integral part of the entire educational community.

ASHA strongly supports the limitation of waivers contained in this bill. We do not feel that the Individuals with Disabilities Education Act as amended, or its accompanying regulations should be included in the waiver section, and we suggest the need for clearer construction language for this section.

We also recommend that the terms "related services" and "related service personnel" be included through the bill whenever the terms educator or teachers are used. Although these services providers are not teachers per se, they offer services that are critical for the quality education of all students, especially students with disabilities.

ASHA firmly believes that the National Education Goals relate to the needs of students with disabilities. Accommodations and adaptations for students with diverse learning needs must be included for all assessment systems and all content standards systems that are developed through the work of the National Goals Panel and the National Education Standards Improvement Council.

We hope that our recommendations are useful to you and we appreciate your consideration of our comments.

STATEMENT OF THE NATIONAL COALITION FOR ADVANCED MANUFACTURING

NACFAM, an industry-led, non-partisan organization, supports the creation of national voluntary skill standards promoted by the National Skill Standards Board, but only if industry plays a key role in determining those standards. While NACFAM believes industry should take the lead in this process, we fully recognize the importance of partnerships between States and Federal governments, industry, labor, and education.

We are submitting NACFAM's views on the skill standards issue for your review. We would like to bring to your attention Sec. 403(b) of H.R. 1804, which states, "With respect to each broadly based occupational cluster identified pursuant to subsection (a), the National Board shall encourage, promote, and assist in the voluntary development and adoption by the groups described in subsection (c) . . ."

To stress the importance of industry's involvement in the setting of skill standards, NACFAM proposes the following change:

"... the National Board shall encourage, promote and assist industry-led working groups whose duty it is to develop and adopt national voluntary skill standards. Each working group shall focus on a set of skills needed by industry and shall include all of those industries reliant on workers who possess those skills. Each working group comprised of organizations described in subsection (c) will develop—..."

NACFAM will support the work of the Board as long as industry is well represented on the Board. In stressing this point, we make reference to the "Analysis of the Finding of the Public Dialogue on Voluntary, Industry-Based Skill Standards and Certification," which was included in an information packet released last October by the Departments of Education and Labor at a reception honoring the recipients of the Education and Labor skill standards grants. The analysis quoted a respondent as saying, "Industry has to take the lead in this process and be fully supported by labor, government and education. More specifically, industry-based trade associations or business groups should become the focal point for the development of standards."

NACFAM strongly believes that skill standards are necessary for the development of a high-performance workforce, which is crucial to America's economic competitiveness. NACFAM has 257 member organizations: 57 corporations (including several Fortune 500 companies); 175 centers of manufacturing technology extension, education, and research (making NACFAM the largest association of such centers); and 25 national and technical training associations (representing between them over 80,000 firms and 25,000 technical education and training institutions).

We would like to thank the Subcommittee on Elementary, Secondary, and Vocational Education for keeping the record open for additional testimonies.

U.S. DEPARTMENT OF EDUCATION

Statement by
Secretary of Education
Richard W. Riley

before the
House Subcommittee on
Elementary, Secondary, and Vocational Education

April 22, 1993

Chairman Kildee, Chairman Ford, Congressman Goodling, members of the committee: It is a pleasure to be with you today to discuss the President's education reform bill, the GOALS 2000: EDUCATE AMERICA ACT.

Like each of you, I am deeply concerned about the quality of elementary and secondary education in America. We must improve our education system if we are to prosper as a democratic country and to build a high-skill high-wage economy. Education reform and improvement must be a high priority in all of our communities and states throughout this great country.

Unfortunately, too many of our students in America receive a watered down curriculum. And for far too many of our students, we have low expectations. Many other countries against which we compete for jobs expect all of their students to take challenging course work in a variety of academic areas, including especially students headed for the work place rather than a 4-year college.

As we approach the 21st Century, our prosperity and dreams hinge on education as never before. The global economy is characterized by an information-rich world, dependent on technology and filled with high skill, high-wage jobs. In this world, the work force, businesses, communities and countries that are the smartest and best educated will do the best. We cannot afford to leave any student behind. Students must know well a variety of subjects -- from chemistry and foreign languages to geometry and the arts and from English and geography to history. Many more students must be competent in both academic and occupational areas as the world becomes smaller and more immediate.

A strong education system is, of course, good for its own sake for an individual, but now it is a social imperative in an ever-changing democracy and an economic imperative in an international marketplace. If we do not meet the challenges, we face, as futurists say, an unacceptable future for many of today's children and their communities. The GOALS 2000: EDUCATE AMERICA ACT is about taking a first step to an acceptable, brighter future for America's children and youth.

Two weeks ago, we released the math results from the 1992 National Assessment of Educational Progress. While progress was made from 1990 to 1992, far too few students reached the higher performance levels; and, the gap in performance between students of different racial/ethnic groups remains unacceptably large. It did appear, however, that students who took more difficult courses, did more homework and watched less television performed better on the NAEP exam. Early signs are that the more challenging math standards and curriculum recommended by the nation's math teachers will make a positive difference in student performance.

In a world in which what you can earn depends upon what you can learn, today's young people will be destined for a future of lower pay unless we can help many more of them take and master more challenging subject matter.

Therefore, we need to redouble our efforts to meet the National Education Goals, and to help all children, regardless of their circumstances, meet challenging standards. That's why putting the Goals and the bipartisan Goals Panel in formal Federal policy to report on progress is so important and is part of this GOALS 2000: EDUCATE AMERICA ACT legislation. To achieve these goals will require a fundamental overhaul of our education system and new relationships and partnerships between our schools and parents, educators, community groups, social and health agencies, business, higher education and early childhood services.

At the Federal level, we can best help by supporting local and State reformers and motivating, leading and providing information and seed money for State and local communities that are looking for ways to improve. The GOALS 2000: EDUCATE AMERICA ACT is about change. It is designed to expand the use of challenging curricula, instruction, and assessments geared to world-class standards ... and do that for all students.

The GOALS 2000: EDUCATE AMERICA ACT will help to identify voluntary internationally competitive standards for what students should know and be able to do in each of the major subject areas and occupational areas. Students, teachers, parents, communities and States can use these voluntary standards developed by the National Education Standards and Improvement Council to judge their own performance. Studies now report that American students don't do as well as students in other industrialized countries. Yet, currently we have no way to provide educators, parents, students or policy makers throughout our nation with information about the content and rigor that students in other countries study and to match this information to our own American expectations for students. The GOALS 2000 process will identify and make such information available throughout America.

Similarly, we don't have information available about what constitutes internationally competitive opportunity-to-learn

standards. Through the GOALS 2000 ACT, voluntary exemplary opportunity-to-learn standards will be identified in essential areas related directly to teaching and learning such as the quality and availability of curricula and materials and professional development of teachers to deliver this higher content. This information will be made available by the National Education Standards and Improvement Council. Again, how can we compete internationally if we don't know what we are competing against? GOALS 2000 will give us that information.

The existence of standards will not change our schools. We need sustained, broad-based, grassroots efforts of parents, educators, business, labor, and citizens all to provide every student the opportunity to reach these standards. The GOALS 2000 legislation will challenge every State and community to develop comprehensive action plans to overhaul their schools so that every student and every school can reach these challenging standards. It will activate the forces of reform which must occur in classrooms, schools, school districts, colleges and local and State governments.

These changes should not be just for change's sake, but to achieve greater levels of skills and learning for all students ... levels that are internationally competitive in academic and occupational areas. Students and schools will work harder and smarter if they are given the challenge and the opportunity.

The GOALS 2000: EDUCATE AMERICA ACT builds on lessons learned from local and State education reform efforts of the past 10-15 years. Unfortunately, these reform efforts have been disconnected and often not sustained. But, these efforts have taught us that education reforms are more likely to work if they:

- are comprehensive and systemic -- pieces fit together like a puzzle;
- focus on challenging curriculum and better instruction for all students, to help many more students to reach higher standards;
- provide teachers and principals with new professional development opportunities, to deliver the challenging content and work with diverse student populations;
- involve more educators, parents, communities and business with school improvement efforts;
- are long-term -- phased in over 5-7 years;
- have State assistance to encourage bottom-up local classroom innovation and school site planning;

- have accountability based on results; and
- provide for greater flexibility to encourage innovation and new ways of organizing the school day and year.

The local and State improvement plans under GOALS 2000 will begin to address changes that best meet each school's, community's and State's unique circumstances. Almost 94% of the funds authorized for this Act in 1994 (\$393 of \$420 million) are dedicated to these purposes.

GOALS 2000: EDUCATE AMERICA is only a first step, but a critical first step to start America down the road to renewal in education. We need major new investments in early childhood and infant and national health as the President has proposed. The Elementary and Secondary Education Act and Office of Education Research and Improvement need to be reauthorized. We in the Department, like you, are reviewing and re-evaluating every part of the ESEA and OERI to revitalize these important programs to help disadvantaged schools reach challenging standards. We need to have a new school-to-work transition, youth apprenticeship program, building on the early successes of Tech-Prep and other similar initiatives.

In addition, this bill would establish a National Skill Standards Board. American workers, employers, training providers and educators must know what knowledge and skills are required. This part of the bill encourages the development and adoption of a voluntary national system of skill standards and certification. The United States -- unique among our competitors -- lacks a formal system for developing and disseminating occupational skill standards.

The challenge for us to lead and to act here in Washington is great. The challenge for educators, parents, students and the public all across America to revitalize and reinvent our schools is great. It has been ten years, almost to the day, since the report entitled A Nation At Risk was released. We have learned much about education reform since then. It is time to apply these new lessons across this land. The GOALS 2000: EDUCATE AMERICA ACT will help do that.

Together we can be successful. The GOALS 2000: EDUCATE AMERICA ACT starts us on that high road to success. We need your help and support to pass it.

OVERSIGHT HEARING ON THE FEDERAL ROLE IN SYSTEMIC EDUCATION REFORM

TUESDAY, MAY 4, 1993

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ELEMENTARY, SECONDARY,
AND VOCATIONAL EDUCATION,
COMMITTEE ON EDUCATION AND LABOR,
Washington, DC.

The committee met, pursuant to notice, at 10 a.m., Room 2175, Rayburn House Office Building, Hon. Dale E. Kildee, Chairman, presiding.

Members present: Representatives Kildee, Miller of California, Sawyer, Unsoeld, Roemer, Mink, Engel, Green, Woolsey, English, Strickland, Payne, Ford, Goodling, Gunderson, and McKeon.

Staff present: Susan Wilhelm, staff director; Mary Gardner, professional staff member; Jack Jennings, education counsel; Diane Stark, legislative specialist; and Margaret Kajeckas, legislative associate.

Chairman KILDEE. The Subcommittee on Elementary, Secondary, and Vocational Education convenes this morning to discuss several issues that will help shape the direction that education reform takes in this country in the months ahead, as we work through this bill.

Secretary Riley joined us week before last to discuss Goals 2000: Educate America Act, which is the administration's proposal to promote systemic reform in schools. Secretary Robert Reich, of the Department of Labor, joins us today to discuss Title IV of this bill, which is the first step in a comprehensive effort to prepare individuals for the workplace.

While we work toward better defining what a quality school looks like and what children should know, we must also give students the tools that will enable them to look at a prospective occupation and know what skills are required for it.

The representatives of the General Accounting Office and the National Science Foundation will discuss systemic reform efforts and possible ways that the Federal Government might encourage such efforts. We will also hear from Dr. Sam Meisels, regarding authentic performance assessments for young children, and Rob Hall will present the National Retail Federation's perspective on Title IV.

Before I introduce our witnesses, I would like to recognize my good friend and "Mr. Education" in the Congress here. I made a visit to his district this past Friday, and he came to my district on

Saturday, and we took testimony on the reauthorization of ESEA. My good friend, Bill Goodling.

Mr. GOODLING. Thank you, Mr. Chairman. Last week, we had the opportunity to hear from Secretary Riley, regarding the education titles of the administration's Goals 2000 legislation. Today, I would like to welcome Secretary Reich and Rob Hall, of the National Federation of Retailers, to discuss Title IV of the bill. I would like also to welcome all the other witnesses that will appear before us today.

With the growing realization that U.S. competitiveness is increasingly dependent on the skills of the American workforce, broad-based support has arisen for the development of national skill standards, and I strongly support the development of such a system in this country. I have, as a matter of fact, with Mr. Gunderson, introduced legislation that is somewhat similar to Title IV of H.R. 1804. My concern, however, was that it be a voluntary kind of thing and not something where there would be too much of a presence of the Federal Government involved.

Two years ago, the Departments of Labor and Education, engaged in efforts to facilitate and promote the voluntary development of industry-recognized skill standards through the issuance of grants to industry-led partnerships of business, labor, and experts in education and training. That seems to be moving along quite well. I believe there are those, who presently have those grants, who are concerned that perhaps Title IV may put too much of a role on the Federal Government and may drive the different partners away from their present development.

I had hoped that it would not become part of the education reform bill, because I thought the education reform bill was big enough, and the skill standards are big enough. The last I heard, we either have 120 some or 140 some programs throughout the Federal Government, dealing with training and retraining. I do not suppose you have found all of those as yet; I have not found them, and I have been here 18 years.

But I would hope that we would have a coordinated effort, and my hope was that we would do this separately so that we would not get involved with education reform. Since we have, I hope we can work together to take away some of the concerns I have in relationship to Title IV.

Thank you, Mr. Chairman.

Chairman KILDEE. I know the Secretary has a very busy schedule, so we will let him testify first and take questions from the members of the committee afterwards.

Mr. Secretary, you may proceed.

STATEMENT OF HON. ROBERT B. REICH, SECRETARY, U.S. DEPARTMENT OF LABOR

Mr. REICH. Thank you, Chairman Kildee, Representative Goodling, and members of the subcommittee. It is a pleasure to be here this morning to testify with regard to the need for high-wage jobs and also credentials to lead to high-wage jobs.

I am enormously encouraged at the bipartisan support that I have heard this morning but also have heard all along the way, since I have been here over the last—it seems like more than 100

days, Mr. Chairman—on issues of school to work and issues of credentialing, issues of making sure that people have avenues of upward mobility.

With the Chairman's permission, I would like to submit my testimony for the record.

Chairman KILDEE. Without objection, it will be included in the record.

Mr. REICH. Also with the Chairman's and the committee's permission, I would like to take a brief few minutes to go over the nature of the problem. Some of you were subjected to me talking about OSHA the other day, with regard to the nature of the problem.

I do not want to spend very much time on this, but I want to make sure that we all are at least somewhat in agreement about what we are trying to achieve and why. Otherwise, we sometimes go off in different directions, without agreeing to even the basic nature of the problem. So if you will tolerate just a couple of minutes of laying the groundwork, I would appreciate it.

Chairman KILDEE. As a former teacher, I like to see a teacher in action before this committee.

Mr. REICH. I try to avoid the temptation to go exactly 40 minutes.

Chairman KILDEE. I had told them that if you did not show up in 7 minutes, they could all leave.

Mr. REICH. There will be an exam, however.

There are two separate, distinguishable, but related problems the administration is trying to achieve and you have been working on with regard to skill standards and credentialing. I want to make sure that we understand that they are two separate problems, even though they are related.

The first chart here shows the percent distribution of increase in job losers during a recession. Mr. Chairman and members of the committee, you can see that on the average for the four prior recessions, 44 percent of the people who were unemployed were going to be recalled. They expected recall, and they in fact did get recalled.

This is a typical cyclical recession in which you have a great number of people who are simply victims of the business cycle. They do not need retraining, they do not need to worry about anything, they will just get their job back.

The whole unemployment insurance system was premised on the notion that this was a very big portion. In fact, if we had done this years ago, there would have been an even larger one there. This is only for the last four recessions.

This recession, some would say, has ended; others would say it is a jobless recovery that is really not much of a recovery at all. You can see that there are only 14 percent of the people who have been unemployed who are getting their jobs back. My point here is that there is an enormous problem of structural unemployment in the economy right now, and that structural unemployment has many sources and many underpinnings.

One of them is that large companies are slimming down quite considerably. The restructurings that began in the 1980s are continuing with a vengeance. Number two, we have military downsizing, which is completely appropriate in a post-Cold War world.

Number three, advances in technology mean that entire industries are changing very rapidly. The computer mainframe industry is no longer what it was. In fact, some would say that it is only a small fraction of what it was. Number four, international trade and the winds of international trade.

All of this adds up to enormous structural changes. This means that people have to change jobs, more than ever before. Americans have to get new skills, more than ever before. They have to know how to get the skills, where to get the skills, where to go to get the skills, what skills they need, and where the jobs are. This is an information problem facing many Americans, really for the first time on this scale.

Next, I would like to show you the second aspect of the problem. It is not the same as the first. It is related indirectly to the first, but you have to keep in mind that it is a second and separate problem with regard to employment.

This is the real hourly earnings of production or nonsupervisory workers on private non-farm payrolls. This is BLS Current Employment Statistics survey, 1992, and this is adjusted for 1992 dollars.

You can see that in 1977, real hourly earnings of production or nonsupervisory workers—everybody other than managerial, professional, and technical workers—were approaching \$12 per hour, on average. They have consistently deteriorated since 1977. This is adjusted for inflation.

You can see that in 1991, verging on 1992—and this is the latest data for which we have fairly confident numbers—they are, right now, just a little bit over \$10, but they are on a downward trajectory. Most American workers have seen their real inflation-adjusted earnings for their cohorts, for their age group, continue to decline, on average, since 1977.

Remember, the first chart was about the difficulty of finding new jobs and the structural adjustment problems we face. Even Americans who have jobs are seeing that it is getting harder and harder to get a job that pays well, that pays as well as the jobs we had before.

The Bureau of the Census tells us that between 1979 and 1991, we had what might be conventionally called the decline of the middle class. Americans at the top did better, and Americans at the bottom did worse. There has been a great deal of controversy as to why that has occurred. These are pre-tax dollars.

Let me show you what I think is perhaps the most interesting chart here. It is a little bit difficult to discern, but let me explain it. I think that this chart actually has an awful lot to do with the others. This is the income of college graduates relative to other education groups between 1972 and 1990.

You can see that the ratio, the income of college graduates relative to other education groups, has continued to increase. If you have less than high school, you are falling further and further behind college graduates, in terms of your real earnings. Less than high school, the ratio is over 2 percent. If you are a college graduate relative to high school, you are doing better and better; not quite as well, relative to non-high-school graduates, but you are doing much better than the high school graduate. If you have 1 to

3 years of college, relative to the college graduate, still you are doing substantially better.

The moral of the story is that much of the decline in nonsupervisory wages, I believe, can be attributed to educational deficiencies, simply not being ready for the new world of work.

This is different from the first chart, remember, which has to do with structural unemployment. These are the people who, because of all the changes in the American economy, cannot find a job that matches their skill. This includes the aerospace defense engineer who now cannot find a job. This is not an educational deficiency problem. This is an information problem, a mismatch between where people are, the skills they have, and where the jobs are. This, affecting most American workers, has to do with their preparation for all jobs, whatever jobs are out there.

They are two separate issues that are plaguing the American workforce, and there is no simple or easy solutions to either of them. This committee has been dealing with both of them for far longer than I have been dealing with them.

Occupational skill standards fits directly within the parameters of a solution or solutions to these problems. In the coming months, Mr. Chairman and members of the committee, the Department of Labor and the administration will be talking with many of you and will be working with you in developing a more comprehensive approach to skills.

Reference was made to the fact that we have, in this country, an awful lot of separate and disparate training programs, not only at the Federal level but also at the State level. We have training programs that sometimes are relevant, sometimes are irrelevant. Many of them at the Federal Government level are categorical, so it is very hard for somebody to even know they are eligible and very hard for somebody to become eligible if they get laid off for purposes for which the categorical grant was not created.

We are going to be working with you. I look forward to talking with you about that concept and the design of that much more comprehensive program which will feature one-stop shopping. We will try to make it much easier for people who need to get some training to go to one place and get the training they need.

We have an additional problem in this country, and I will be talking with all of you about this. It is how to ease the adjustment from school to work for many of our young people who are not going on to college.

You saw that chart with regard to nonsupervisory workers. A lot of that is young people who, years ago, could simply graduate from high school, get a \$16-an-hour job in a factory. They cannot do that any longer because that \$16-an-hour job is not there any longer. We will be working with you on developing those designs and those programs.

Central to all of these training issues, central to the question of what jobs and where, is the issue of skill standards. When I go around the country and talk to people about getting more skills and better skills, upgrading themselves, the first question that people ask me is, "Training for what?"

There is nothing worse than asking somebody to get trained, or having somebody get trained, or being trained yourself, for a job or an industry which does not exist.

I was in Seattle, not long ago, talking to timber workers. We had a lot of discussions about "Training for what?" I have talked to defense workers, and I have talked to workers who were affected by international trade.

Even when I can give a satisfactory answer of what they can be trained for, the next question they ask very often is, "Once I am trained, how can I show any future employer that I indeed have the competencies and the training relative to that future employer? What is the credential I can show if I am not college educated? What can I use to prove that I indeed have that credential?"

In this country, we have a system that sorts the college educated and puts them on one track and everybody else on another track. The college degree is utilized by employers as a proxy to symbolize, "Here is somebody who went through 4 years. Here is somebody who has, obviously, a certain degree of skills and education."

I can tell you, as a former university teacher, the college degree does not have very much to do with actual skills on the job. It is simply an indication that here is somebody who, Mr. or Ms. Employer, you can invest in, confident that the person has at least the basics, the fundamentals.

Given the growing gap we have in this country between people who have a college degree and other people who do not have a college degree, we need to think imaginatively about how to provide other avenues of upward mobility for people who do not or cannot get a college degree. We cannot afford to degenerate into a two-tiered economy, a two-tiered society of the sort you saw when I presented those graphs to you. We have to explore how we can provide people with a credential that will get them a good job.

Remember the two questions that I keep hearing: "Training for what?" and "How can I prove that I actually do have the training, that I have the credentials?"

There is one question that a lot of business executives ask me: "How can I find the person I need if I am not going to rely solely on a 4-year college degree? How can I be sure that somebody has the skills that I need? I cannot simply rely on their representations. Or if they have training, I cannot simply rely upon the name of the training school or institute, because there are too many of them, and the training programs are fragmented."

There is an information problem here, on the supply side and on the demand side. On the supply side, it is an information problem because people do not know what to train for, and they do not know how to prove that they have a credential. On the demand side, a lot of employers do not know how to identify people, non-college-graduates, who in fact have the relevant training.

We have to get supply and demand together, both in order to overcome the structural unemployment that is growing in this country but also to provide avenues of upward mobility for kids who are not going to college.

Nationally recognized skill standards provide a place where supply and demand can come together. They provide answers to those three questions potentially: Training for what? How do I

show that I actually have the basic competencies? And for employers, How do I find the people I need, if I am not going to rely only on college degrees.

A great deal of work has already been done in this area. The Department of Education, the Department of Labor, many of you, and States and localities have been involved, and many industries and certainly labor unions have been involved in developing skill standards. There is a lot of positive work that has gone on.

The purpose of this proposed legislation is to provide an added impetus and a framework for the work that is going on and to do so in a way that provides a national focus so that these skills are portable across boundaries. People are going to have to move a lot.

We want to make sure that the skill standards and the development of skill standards comport with six basic criteria. First of all, as I said, that they are nationally portable and that they are recognized nationally.

Second, that there is a kind of national clearinghouse with regard to supply and demand. A lot of these things are going on all over the country, but nobody knows about them. In Florida, they do not know about the skill standards being developed in Michigan. There ought to be a place where there can be knowledge and fertilization across boundaries.

Third, they have to be developed by business, labor, and educational institutions. This is the place where all of those communities meet. These skill standards are not going to be useful unless business needs them. They are not going to be useful unless educational institutions, short of the 4-year college—here I am talking about community colleges, technical colleges, and all kinds of educational institutions—utilize them. They are not going to be useful unless workers and labor unions have a voice in the sense of, "This is the frontline worker. This is what we need. This is our perspective." They are not going to be useful unless all of these communities come together. As we see around the country, where these skills are being developed and those communities are not coming together, they are less useful for the purposes I mentioned originally.

Fourth, credentialing ought to be based on assessments of performance and outcomes, not on tests, wherever possible. This is something I talked to Congresswoman Mink about last night. Tests often do not measure anything better or more profound than the ability to take a test. Again, I can put on my college teacher hat in attesting to the value of tests and measuring the ability to take tests. What we need is assessments based on performance and based on outcomes.

Fifth, free of bias. I and my staff have been talking in recent days with civil rights communities, here in Washington and others in the civil rights community. Obviously, there is a history to this. You do not want to create any kind of tests, any kinds of assessments, or any kind of standards which are biased in any way, which in any way violate or abrogate or in any way put in danger the principles of the Civil Rights Act of 1991.

Sixth, we should not have, and do not need, a big bureaucracy. This is why the idea is to have an independent board, a board that is not part of a government department, a board that can be a facilitator of all these groups coming together. A very small budget.

People on the board not paid full-time salaries. People on the board representing these very different communities that need to come together to provide some national coherence to the skill development and standards process.

Mr. Chairman and members of the committee, I will look forward to getting into detail with you about this legislation, but let me wind up my prepared remarks by saying this. I view the skill standards as a unifying device. Reference was made to all the different training programs. We have a lot of different training programs—the government does and the private sector does.

We have a lot of confusion out there in the market as to, "What should I be trained for? How do I show that I have been trained?" and also by employers saying, "Where can I find the right people?" If skill standards are created appropriately and well, then there are answers to all three of those questions because you create the possibility.

There are new potential occupations out there. I have seen them. I have talked to people in them. They do not require a college degree. Computer aided drafting and design. There is a demand out there for people who can do computer aided drafting and design, but there is not a skill standard, and people do not know that there is a demand. The business community needs it, but there is no way of actually showing that you have that training.

Manufacturing specialists, who are able to use statistical process control, who can do basic computer programming, who can do work scheduling and cost accounting. These are the frontline workers of the future: independently self-managed teams. You go to the best factories in the United States and these are the people you see. These are the skills they need. There is no way of preparing for these jobs right now. You cannot get a certificate.

Environmental remediation. A big industry. It is going to be a bigger industry. You do not need a college degree to qualify as a specialist in environmental remediation, with regard to having the basic technical knowledge of contaminants or pollution reduction technologies. You should not have to have a college degree.

The former West Germany, with higher real wages of production workers than we have, has a much smaller proportion of its population going on to college. There are avenues of upward mobility, and there are ways of credentialing people there that provide those avenues of upward mobility. We do not have them here. We need them. Thank you.

[The prepared statement of Hon. Robert B. Reich follows:]

STATEMENT OF ROBERT B. REICH
SECRETARY OF LABOR
BEFORE THE SUBCOMMITTEE ON
ELEMENTARY, SECONDARY, AND VOCATIONAL EDUCATION
COMMITTEE ON EDUCATION AND LABOR
UNITED STATES HOUSE OF REPRESENTATIVES

May 4, 1993

Chairman Kildee, Representative Goodling, Members of the Subcommittee:

This Administration has made a commitment to bring America's workers and high-wage jobs back together again. I am pleased to have the opportunity today to emphasize for you the fundamental role of skill standards in realizing this commitment.

Our national economy is becoming, increasingly, a technological and global economy. To succeed in the new economy, our workers must be better-educated, highly-skilled, and adaptable – as well as trained to world-class standards. Developing and sustaining a globally-competitive workforce will require a significant, long-term commitment to improving education and training.

But increased funding for education and training alone will not suffice. We must be able to direct our training efforts toward creating higher-skill and higher-paying jobs. We need to make sure that our training programs effectively supply the skills employers demand – and that our programs open doors to opportunity and responsibility – not close or restrict them. And we need to ensure that students, employees, and job-seekers, whether seeking first jobs, better jobs, or new jobs – can be confident that they are getting top-quality training – and that their training efforts will culminate in a certificate of competency, recognized and respected by employers.

The experience of our competitors clearly demonstrates that certificates of competency and mastery provide industry with critical benchmarks and offer students, workers, and employers valuable, reliable information concerning occupational skill levels. However, the United States – unlike most major industrialized nations – has no formal system for developing and disseminating occupational skill standards.

Our nation does not lack models of effective education and training – but we are missing a comprehensive framework for the development, assessment, and certification of workforce skills.

The Goals 2000: Educate America Act (H.R. 1804) lays the cornerstone of the Administration's comprehensive strategy to create a system for developing the higher skills that lead to higher-paying jobs. The development of a well-educated, highly-skilled workforce requires high occupational skill standards, as well as high academic standards.

Skill standards provide a critical link between the education system and the labor market. Title IV of the bill would establish a National Skill Standards Board responsible for promoting the development and adoption of a voluntary, nation-wide system of skill standards assessment and certification.

Both H.R. 1804 and other legislation currently before you build on the widespread, bipartisan consensus that has developed – across different industries and among varied interest groups – that this nation needs a skill standards system. We are not starting from scratch: significant contributions to the development of such a system have already been made – by business, labor, educators, and the states – and with able leadership such as yours, Chairman Kildee. This work, and the efforts of the Labor and Education Departments, have provided important indications about the benefits of a voluntary skill standards system. With a system of skill standards in place:

- **students** in education and training programs can earn a credential that is portable and recognizable;
- **job applicants** – armed with a meaningful certification of their skill levels – can have fair access to employment opportunities;
- **employers** have reliable, performance-based information with which to evaluate workers' skill levels; and
- **workers** – thanks to a coherent, credible system of assessing and communicating skill levels – can certify that they have mastered the skills necessary for world-class productivity and can enhance their employment security with portable credentials and skills.

In addition, a voluntary skill standards system will benefit:

- **industry**, by giving training providers and prospective employees information concerning the skills needed for employment in specific occupations;
- **training providers and educators**, by establishing benchmarks for appropriate training services; and
- **government**, by promoting accountability among publicly-funded training programs and protecting the integrity and efficacy of public expenditures.

In concert with the Administration's other initiatives to develop our nation's human resources, such as the school-to-work and one-stop-shopping proposals, a voluntary skill standards system can provide a powerful means of ensuring our education and training programs work together.

But the tremendous scope of the task and the intrinsic importance of ensuring a comprehensive, national system militate against the ability of any one group to develop the system on its own. That is why the private sector has actively sought the Federal Government's assistance in bringing the necessary partners together.

Title IV of Goals 2000 takes us to this critical next step – by providing impetus and structure for the stakeholders to develop a skill standards system. The title establishes the National Skill Standards Board, with balanced representation from business and industry; organized labor; and educators, community-based organizations, and state and local governments – in addition to the Secretaries of Labor, Education, and Commerce, and the Chair of the National Education Standards and Improvement Council, also created in the Goals 2000 legislation.

The Federal role in this endeavor does not include top-down mandates or more bureaucracy. Rather, the Board's task is to help the major stakeholders to develop the system, by:

- identifying broad clusters of major occupations that involve one or more industries in the United States; and
- for each occupational cluster, promoting the development and adoption of skill standards, and the means of assessing and certifying the attainment of such standards.

The legislation ensures that the process of developing skill standards is inclusive and representative. It specifically requires the balanced participation of the key players in each industry or occupational cluster and provides for extensive opportunities for public participation and comment before the Board endorses any proposed skill standards.

It is time to take the next step. Our entire economy is suffering from the current mismatch between jobs and skills; our workers and our children deserve better. The development and adoption of a voluntary, national skill standards system will help make sure that Americans equipped with new economy skills are ready for new economy jobs.

Thank you.

Chairman KILDEE. Thank you very much, Mr. Secretary. I appreciate the work of your staff and the staff of this subcommittee, along with the work of the various civil rights groups in this country, responding to concerns as to civil rights in developing these skill standards. I think we have reached a consensus on that, and it has been very helpful.

As you know, Mr. Secretary, I am from Flint, Michigan, the birthplace of General Motors. At one time, we used to have about 80,000 General Motors employees there. Now, we have somewhere between 40,000 and 50,000, depending on sales out there in the market. Very often in this country, we find unemployment increasing or stabilizing, even in the midst of a recovery. We find, at the same time, productivity in this country going up.

What message should that send to our education and training people, the fact that we have a different situation out there: productivity increases and our unemployment stabilizes.

As a corollary to that question, how good, in general, is training in this country? I would like to ask you as a college professor, and you can decline if you want, if you were to give a grade to training in this country in general, would you give it an A, B, C, D, or F?

Mr. REICH. Mr. Chairman, in partial answer to your question, with regard to the labor market system that we have, the system we have in place for getting people from job to job or getting people ready for a job without a college degree, I would give the entire labor market system we have a D. It is not quite failing, but it is close to failing, and it is certainly failing many Americans.

The irony, of course, is that we have a public and private system in this country, rivaled by none, with regard to moving financial capital from place to place. We have laws, regulations, brokers, and commissions. We have a system of exchanges, one of the most elaborate and most successful systems in the world, for moving money to the highest and best use.

We do not have, as compared to other industrialized nations, a good system, a modern system, for helping people move from job to job, getting the training, the support, the counseling, the information they need. One of the things I am going to dedicate myself to, and again look forward to working with this committee on, is creating such a system. It is not going to happen overnight, but it is desperately needed by more and more Americans.

Chairman KILDEE. We have out there among our training mechanisms JTPA. I know that is not what you are here to testify on directly, but has that system worked as well as you would want it to work?

Mr. REICH. No, it has not. On the basis of information that I have gleaned, and I am reading all the studies I can and going out and watching and looking at all of the training centers I can possibly watch and look at, I think that JTPA is doing a fair job for some populations which it was intended to serve. It is not doing a very good job, and in fact some studies show that it is doing a very bad job, having a perverse effect on young people, particularly teenagers and particularly teenage boys, with regard to giving training.

One thing we know about training is, it has to be intense, and sometimes it has to be long. Short-term non-intense training does

not work. With regard to poverty populations, one of the most successful training programs we have is Job Corps. What is there about the Job Corps that characterizes it and makes it different from many of our other training programs? It is intense, it is long term, and it really changes people's lives. It is a very expensive program.

The needs of people in this country who have been unfortunate, who are living in places where there has been a breakdown of both the family and the economy, are enormous. We are also addressing today the needs of working class Americans, average Americans. They, too, now need a great deal of help finding new jobs, getting better jobs, getting employed.

Chairman KILDEE. I am the chief sponsor of a bill that would increase the number of Job Corps centers by 50. I have seen real training take place there for real jobs. I think we really have to proceed along that line to get training, particularly for our people who are disadvantaged and really can be lost. We have to address that, and I know the President is very concerned with improving that program.

One final question. You said, "Training for what? How do we prove we have the training?" And the employer may ask, "How do I know the person is trained?" Those three essential questions. After those questions are answered, what role does employer-provided training play in the scheme of things?

Mr. REICH. Employers around America are spending approximately \$30 billion a year training their employees. This is a good, hefty sum. Thirty billion dollars is about what the States and the Federal Government spend on unemployment insurance. It turns out, on closer inspection, that approximately two-thirds of this sum, about \$20 billion, is spent on employees who already have college degrees. The 75 percent of Americans without 4-year college degrees, who are in the most need and are most in danger of losing their way economically, are getting a relatively small portion of that \$30 billion package.

Chairman KILDEE. Thank you very much, Mr. Secretary.

Mr. Goodling? Mr. Gunderson?

Mr. GUNDERSON. Thank you very much, Mr. Chairman.

Mr. Secretary, welcome back. One of these days we will let you quit testifying and get some work done, but it is always enjoyable to hear your presentations.

You know that some of us are concerned about the board. I am sitting here trying to figure out if we are so much in agreement that we are focusing on the minute details or if the minute details are so much the foundation of what we are trying to do that unless we resolve this, nothing works. I have not figured out the answer to that yet.

Let me read to you what Mr. Hall, from the business community, is going to say later in his testimony. He said, "However, the fear in the business community is that the national board would divert the development of skill standards away from employers, employees, and training providers. For skill standards to work and to have real meaning, the individuals who will be using them—the employees, the employers, and the training providers—need to be involved at every stage of the process."

I will follow that up, if I might. We are not clear, very frankly, as we look at the legislation, whether you mean this as voluntary or mandatory. Let me just share the language that troubles us.

In section 403(b) of the bill, you say it is the intent to "encourage, promote, and assist in the voluntary development and adoption of skill standards." If you contrast that with section 403(a), it says, "The Board shall identify broad clusters of occupations . . ." and it goes on to say, "This shall be done" by, I think it is, 1995. You actually use the language on page 88 of the bill, where you say, "The National Board determines, after public review and comment, that these standards are appropriate for the industry or occupation."

That seems to tell every industry that you can develop any kind of voluntary skill standards you want, but this board—not you, the industry—is going to determine whether they are appropriate for your industry and for your occupation. How do you alleviate this concern that we are going to create an all-powerful board, as opposed to facilitating the development of voluntary skill standards within each respective industry?

Mr. REICH. Congressman, perhaps the word "board" semantically conjures up the wrong images. I envision a clearinghouse—a group of business, labor, and education people—who are able to identify, under section 403(a), broad clusters of major occupations where, as I have tried to identify just a moment ago, there seems to be some need.

Again, the business community is absolutely critical here and the education community is critical. This is a forum. It is a conversation where we say, "It looks like we do have a need here." If they are wrong, if there is not a need, those standards will never be used. This is why they are voluntary. If they are right, supply and demand come together.

In section 403(b), it says: "encourage, promote, assist in the voluntary development and adoption" by the groups of those standards.

Again, if the board is wrong, if there is no need, then those standards will not be used. They will be utilized only if those standards genuinely respond to the underlying questions: What should I be training for? How can I prove that I have that skill? And for the employer to say, Where can I find the people I need? This is all a matter of supply and demand.

Unfortunately, in legislative language, we talk about boards and we talk about "representatives." The minute we talk about representatives, we all get into the language of legislating. Let me again hasten to say and underscore, the purpose here is to answer the three questions and to bring supply and demand together.

We want to create a forum in which business, education, and labor have a better chance than they do now of identifying areas where skill standards would ease market adjustments, bring people and skills and areas of need together, and also provide some benchmarks for young people and others who want to get skills and community colleges and technical institutions who want to know what they should train people for.

Mr. GUNDERSON. How would you respond if, rather than a board, we created an advisory commission that had the advisory function but made it clear that it was not an all-powerful board?

Mr. REICH. Congressman, I would be pleased if you called it a banana. It does not matter. The semantics really do not matter. The function is the most important thing.

I did not mean to be flippant with you just now.

Mr. GUNDERSON. No, I am not offended.

Mr. REICH. To the extent that the semantics are getting in the way with regard to conjuring up images of regulatory authority, I would be very open to exploring different words that have less of that kind of effect.

Mr. GUNDERSON. The concern I have, and I think we agree, is that we are playing catch-up in this area. You are recommending a 28-member independent national board. You and I both know that you are going to have to develop the regulations to make sure the board is independent but not so independent that, very frankly, you and Secretary Riley cannot get done what needs to get done.

Then you are going to have to establish an appointment process. If I understand correctly, we are going to get three appointments from Bob Michel, three appointments from Tom Foley, and three appointments from Bob Dole, and three appointments from George Bush, and then the administration is going to figure out who they are, and they are going to have 12 of their own to counterbalance those congressional appointments. Then we are going to have these four official appointments being the Cabinet secretaries and the chair of NESC.

Then, all of a sudden, we are going to get this group together and they are going to say, "By God, we have an appointment, and we are going to do something to change the world." And you are going to say, "Wait a minute, guys. We have to get something done." I really worry.

That is why, in the bill that I and Congressman Goodling have introduced, we have said, frankly, we are Republicans, giving you, the Secretary of Labor and the Secretary of Education, the authority to put together a compact. If you want an advisory commission that helps you, that has involvement from the private sector, I am all for that.

I think we are going to spend more time creating and controlling this board than getting done the very mission that I think you and I, and I think most of us, seek to do on a bipartisan basis.

This seems to me, with the possible exception of this civil rights issue on disparate impact, to be the only two real stumbling blocks that we have to work out. Any help you can give us in that regard or willingness I would appreciate immensely.

Mr. REICH. Again, I am gratified—my staff has told me, and other staffs working here continue to work very closely together—that there is very strong bipartisan support with regard to dealing with the problem and also coming up with a solution along these principles.

As you said, we do not want a big bureaucracy that suddenly meets and says, "We are going to change the world, and we are going to mandate something that is not here." The proposed legislation gives them no power to mandate anything.

Again let me underscore. If this board fails to do what the market needs it to do, if it fails to identify areas where there really is a need for jobs, and where, if people were skilled appropriately, they would be able to fulfill that need. If the board fails to do that, which is its central function, overcoming that market imperfection, then the board becomes, very rapidly, useless. If it fails to do what it is supposed to do, it literally has no function.

What I hear you saying, and I understand exactly what you are saying, is that you do not want to create a large group of people who all feel that they are representatives of some other group of people, and that their entire purpose in being there is simply to represent their constituency. I understand that. That is why the word "representative" is an unfortunate word.

On the other hand, it is vitally important that if this board, or whatever you want to call it, is going to be able to identify areas of potential needs and potential skills and bridge that gap, there are people at that table from the business community, from the education community, from the labor community, because those are the communities that have the most information about how to bridge that gap.

I do not have any better idea about how to make sure that they are all around the table and how to also ensure that there is this kind of national clearinghouse.

Mr. GUNDERSON. Do you see this as primarily related to the youth apprenticeship programs or to our existing apprenticeship programs as they exist in the adult trades?

Mr. REICH. This board and the voluntary skill standards that emanate and are encouraged and facilitated by this board would help in every respect. It would help with regard to youth apprenticeship or school-to-work programs because it would provide information, answering those three questions that I presented.

It would help in people getting a new job, people who are dislocated workers who want training: Where do I train? What do I train for? Employers: Where do I look to get the people I need? It would help an aerospace technician. The engineer probably has a college degree, but let's take the aerospace engineer who wants to get some skills which might build on aerospace engineering. The aerospace engineer has no idea right now where there are jobs that build upon those skills.

This certification process and this board, if it works and functions as it should, will provide some answers to those questions.

Mr. GUNDERSON. The Chairman is ready to gavel me down, so let me make a closing comment here. I hope that our goal is to break the mold in designing new apprenticeship programs for the 21st century, in not establishing a national skill standard for industrial apprenticeship trades of the 1950s. We have to figure out how we can accomplish that. Thank you, Mr. Chairman.

Chairman KILDEE. Thank you, Mr. Gunderson.

Mr. Ford?

Mr. FORD. Thank you, Mr. Chairman.

The Secretary's concerns triggered something familiar to me, and I started searching back through my computer for it. Then I had to consult with my colleague who came to this committee with me in

1965, Mrs. Mink. I said, "Who was that guy that Johnson had as Secretary of Labor, who came down and said what he is saying?"

It was Willard Wirtz. He used slightly different language to describe a set of concerns that you just described when you talked about putting supply and demand together.

There were members on both sides of the aisle who reacted like the gentleman from Wisconsin who said, "That sounds like a very complicated group of people to put together to do something." That was late 1965.

It was because the older members in my party and the other party could not conceptualize that we would ever be where we are in 1993, where there was not a single industrial job out there available to an illiterate worker, that was an unknown in those days. We could get jobs in the 1960s for people who could not read or write and who could not speak English, but we cannot today, not even at minimum wage, unless it is sweeping the floor or doing the most menial of service jobs.

Because this committee was unwilling to wrestle with a concept that was a little bit novel for the time, we have wasted 30 years to start talking again about what you are talking about here today. I want to tell you how grateful I am that somebody came along before I finished my career and picked up where Willard Wirtz left off, and I hope you have better luck with the Congress of 1993 than he had with the Congress of 1965 and 1966.

We were busy passing programs like they were going out of style. "What do we need business people to tell us what we ought to train people for?" Educators told us that. We have learned, some of us, over the ensuing years that neither business nor educators have the answer, when they are operating independently of each other.

As you said, we have some places in the country where we are already doing this. I keep talking about it, and I have talked to you about it. I want to get you out there. We are going to invite the members of the full committee out there, when Mr. Goodling and I get an itinerary, to look at some of the places where people are doing what we think is what ought to be done to get us through the end of this century.

Actual arrangements have been made by educators and trainers with industries, with a specific industry, where the industry says, "Let us help you develop a curriculum. If you train a person and say that they have capability A, before you teach them capability B, and then you teach them capability C, when they get to the point where they are proficient in capability D, we will hire them and teach them E, F, and G."

There is a school in my district that has been doing that for jobs that are not even in the same State with the school for 10 years. So we know it can work, if you have businessmen of good will and educators of good will, but more importantly if they will sit down and talk together. Sometimes you have to force them into it.

This committee, again going way back into the 1960s, was the first committee that said that vocational educators in this country had to have a business advisory committee. When we first did that, the traditionalists in vocational education said, "Oh, we are going to have a lot of messing around with businessmen."

In some places, the business advisory committee became the operator of the downtown dime store, whose idea of training was really very limited. We go nowhere with it for years. We are still arguing with people about whether or not, in vocational training, there is something for educators to learn from businesses about what they ought to be teaching in vocational education.

Now you are coming along with this. I know that Mr. Gunderson is going to be right at the front of the parade for something that really is kind of avant garde. It is *deja vue* all over again. Let us not have somebody sitting here, 30 years from now, saying, "Who was that Secretary of Labor who told us we ought to get off our duff and do something about this?"

We muffed it the last time. I was a very junior member, as was Mrs. Mink, of the committee then. We watched our elders, with their wisdom, sort of brush it off as a pie-in-the-sky idea. "Maybe the Japanese can do it, maybe the Germans can do it, but it is not for us." You have come along now, and you are talking to people who are not as hidebound by tradition as this committee was in 1965, and I wish you well.

The interesting thing about these provisions of Mr. Kildee's bill is that we have already had a flurry of concern by the civil rights groups, which I believe have been satisfied because we dealt with the same people we dealt with in writing the 1991 Act. I believe that everybody, on all sides, came to the table trusting each other. It was in relatively quick time for that kind of an issue to be worked out.

There are others who are saying, Mr. Secretary, that this part of the bill is really such a great idea, and it is so sexy, that we should not tangle it up with Secretary Riley's education bill. We ought to go with this all by itself, because this is going to make us all heroes if we pass it.

I do not know what that really means to us, but some people want to kill you with kindness, and some people want to kill you with misdirected concern about your zealotness to get there by running over civil rights. We will work through this, and we will get it done, but it actually has to be.

Let me leave on this record one thing. You said it. One thing you do not emphasize hard enough, but you started it with me in the very first meetings we had. You said that Bill Clinton is very conscious of the fact that 75 percent of the kids in school now are not going to finish college. That is the flip side of saying that only 25 percent of our kids are graduating from college.

Everything you look at says: if you do not finish college in this country, you have a pretty rough chance of ever making it onto the lower rung. You and Secretary Riley as well, and others from the administration, have kept saying, "We want to concentrate on the people who get missed in the regular system with an opportunity for college."

That does not take anything away from what we are doing with the new loan program and public service and other things to encourage even more people to go to college.

Even while we encourage more people to go to college, we have to recognize that some of them are not, for a whole variety of reasons, going to go and also that only about one-half of the people

who start are finishing college today, and that the average time for a 4-year degree is 5 now, not 4 years.

These are realities. We did not wish for this, but that's the realities we live with. If we don't pay attention to people like you who are talking about that 75 percent, and what we could do for the top one-half—forget them all. Let's accept, going in, we have never been able to do anything and get them all.

If we could get the top one-half of that 75 percent, we can revolutionize the workforce and recapture a middle class working population in this country, which is disappearing, in my part of the country, before our eyes like sand going through an hourglass.

You referred to young people coming out of high school, getting \$16-an-hour jobs. In my part of the country, as long as you had not gone to jail by the time you were 18, Ford, General Motors, or Chrysler would hire you.

You did not start for \$16, but it did not take you very long to get there, and you had fully-paid health benefits, and you had vacations, and you had everything. In a couple of years, you could buy a new car and get married. In a couple more years, you were buying a new house in my congressional district. You did not have to know how to add two and two and get less than five.

The jobs that were then available do not exist any longer. The kid who falls through the cracks now is a guaranteed failure. For every person we have known in our lifetime, who made it without education, that leaves with us the impression that there is something wrong with people saying, "You have to have it, or you can't make it."

The truth of the matter is that the young people in my district know that they cannot get past the front door of an automobile factory if they are not computer literate, never mind able to read and write. They cannot get an interview for a job, for the lowest-paying job in the plant, if they are not computer literate.

That is revolutionary, and that is what I believe you are talking to us about here. I hope that we are able to retain this in the bill and get you started on that project. Thank you very much.

Chairman KILDEE. Mrs. Unsoeld?

Mrs. UNSOELD. Thank you, Mr. Chairman. The National Skill Standards Board has the power to certify skill standards and the assessment of workforce skills, but I am concerned that there is no one on the board who has that expertise in assessment. Does that bother you?

Mr. REICH. Congresswoman, the way the board is now structured would permit appointees who have that kind of expertise. There is nothing to—

Mrs. UNSOELD. Ensure it.

Mr. REICH. [continuing] ensure it, but it would permit it.

Again, it would seem to me, from the standpoint of Congress and the President, in putting the specific board together, if the board was going to have any positive effect whatsoever in identifying those skill shortages and also identifying areas to which the non-college graduate could aspire but also, for that matter, being a broker in a labor market system that increasingly needs that kind of brokerage function, the ability to undertake and the knowledge

of skill assessment would be a very important attribute in selecting those people. It would be one among many attributes.

Mrs. UNSOELD. As proposed in the bill, what do you see as the role of educators on the National Skill Standards Board and the institutions of higher education?

Mr. REICH. I see the role of educators as bringing to the table an understanding of how people learn, of what the educational institutions—not only colleges but community colleges, technical institutions, and others—are capable of doing, a deep understanding of how people learn how to learn.

Remember, what we are talking about in developing skill standards is not the capacity to suddenly go on the job and know everything forever that needs to be understood with regard to that job. There will be no such jobs in the future economy. You cannot ever stop learning in the future economy.

What you do need is to develop a tool kit which enables you to continuously learn on the job, and those tool kits come in many shapes and sizes. Educators are critical, in terms of understanding what the nature of what those tools may be.

Mrs. UNSOELD. Are you going to be able to ask for, or expect to get, additional appropriations for training and retraining?

Mr. REICH. Overall, with regard to training and retraining, the President has asked for an increase in fiscal year 1994 of over \$1 billion and, in fiscal year 1995, of slightly more.

In the great scheme of things, I do not think that is fully adequate to the task, but we want to start slowly and make sure that the program really does meet the needs of people who, in fact, are out there right now on their own without any knowledge or information or access to training.

The demand is huge, but we need to establish not only the skill standards, but also the one-stop shopping, places that are easily accessible in communities. Instead of getting your unemployment insurance over here, and checking with the employment service over here, and getting a training program there, and maybe just coming across a training program by accident over here, they all need to be integrated and consumer friendly.

Finally, the third piece is a school-to-work system in which business, labor, and educators are actually designing a curriculum for people, perhaps eleventh and twelfth grade, perhaps one additional grade, employing some education at the worksite, enabling people to achieve whatever occupational standards they may want.

In other words, what I wanted to sketch to you is, these are all pieces of a system which the United States does not have at all.

Mrs. UNSOELD. Very quickly, I have a question about the general applicability of the standards. If you have somebody who is meeting the standards and has been trained accordingly, but it turns out is in another skill line where there is a job availability, is there a general application of skills that can be made that will serve them in good stead, or are they going to have to go back through another retraining program?

Mr. REICH. They do not have to do anything. Again, let us take the case of the defense worker, the aerospace engineer who is very highly qualified and highly trained. That person would like to know and understand where those skills might be applicable and

also would like to understand what credentials might be useful for getting a new job that builds upon the skills that aerospace engineer has already.

It is perfectly possible, for example, that there is a skill standard, as I suggested by way of illustration, in environmental remediation, in which an aerospace engineer can bring the aerospace engineer's skills to bear, get a certificate or a credential in environmental remediation, and then be an engineer who can undertake environmental remediation. That person could do it anyway, but the credential provides the employer with a signal that this particular individual has mastered an area of competence.

Mrs. UNSOELD. Thank you.

Chairman KILDEE. Mr. Miller?

Mr. MILLER of California. Thank you, Mr. Chairman.

Mr. Secretary, thank you for your explanations this morning. I am not quite clear. When we are done with developing these standards, they are to be used in what setting at that point?

Mr. REICH. The standards are used in two ways. They are used both at the supply side and on the demand side by a prospective employee who wants to show and signal to an employer that he or she has mastered a certain area of competence. They may have other ways of doing it as well. This is a supplement to, perhaps, other ways of showing it.

This is simply: "Mr. Employer or Ms. Employer, I have a certificate of competence. I have a particular occupational standard in X or Y." That improves the labor market in just the ways that I suggested.

It also works on the other side. The employer can be on the lookout for people who have a certificate of competence or mastery in X.

Mr. MILLER of California. The budget committee uses a term called "crosswalking." Do we take these standards and crosswalk them to vocational education programs or to employer/employee training programs? Where do we go with these standards? Does a community college redesign its program in hazardous waste to issue a series of certificates? That is what I do not quite understand.

Mr. REICH. Congressman, let me give you a specific example. Let us assume, for the sake of the argument, that the skill standards board had facilitated, urged the development, discovered actually, that industry needed and that there was a skill gap with regard to the upgrading of computer machinery.

We know, in the 1980s, a huge amount of information technologies were bought up by the private sector in the United States. I personally have reason to believe, on the basis of an awful lot of data I have uncovered, that American industry needs people to continuously maintain and upgrade those computers. Right now, a lot of American industry has to rely on people with college degrees or more. Many of those jobs, functionally, do not require college degrees.

Suppose there were a credential as computer maintenance specialist. Suppose that I never attended college, but I wanted to get a good job——

Mr. MILLER of California. I understand, but who issues that credential? Does the Iowa State college system have to go to the board to put forth a curriculum that will lead to the issuance of that credential?

Mr. REICH. No. No.

Mr. MILLER of California. Does the IBM Corporation go to the board or a technical school?

Mr. REICH. Not at all. Let us, once again, follow the illustration. Suppose that there were indeed a credential called a "Computer Maintenance Specialist." At that point, community colleges and technical colleges could decide for themselves, on the basis of their assessment of the market, whether they wanted to offer courses in computer maintenance and upgrading that would enable individuals to qualify for the credential developed through the system of which we speak.

The data they have now they did not have before. That is that the private sector has made a tentative decision that there are jobs out there because the private sector is part of this process. If the private sector were not part of this process, then the process would not have any validity nor any utility.

The fact that the private sector, entering this process, has indicated that it needs computer specialists who are able to maintain and upgrade is a very powerful signal to the educators.

Mr. MILLER of California. I agree with all that. Maybe I am not clear in my statement. I understand that.

My concern is, when the educators decide they are going to do this, who certifies that this is a program that leads you to that certificate?

Mr. REICH. The program itself does not have to be certified.

Mr. MILLER of California. But if I cannot go to the employer, and the employer has agreed—

Mr. REICH. You then have an assessment. You, the individual who wants to be, say, a computer maintenance specialist, would apply for an assessment. You would have an assessment, and the board would arrange for you to be assessed. Ideally, that is not a test, as we talked about before. It is more performance oriented.

The board would authorize assessments. The board would ensure that assessments follow a particular set of routes. The community college would not be involved, necessarily, in the assessments. It could be involved in the assessments, but the board would certify the assessment process through its endorsement function.

The only reason the community college would be offering these particular courses is, the community college senses that there is a demand out there, and graduates of that community college would be in a better position to get that certification than people who did not go to that community college.

Mr. MILLER of California. We are not going to settle this in 5 minutes, but I think there are some serious questions about this approach. One, the way you just explained it there, it sounds to me that, as opposed to giving people a broad range of skills that allow them to move from a job five times in their life or eight times in the coming generations, we are back into niches for people as computer specialists or environmental specialists.

Mr. REICH. Again, maybe computer specialist was an unfortunate illustration. A computer specialist, somebody who understands computers and can maintain and upgrade computers, is really a cross-section. It is a very large field of competence.

The purpose underlying here—and again, let me make this very clear, if I have not—is not to supplant the market. It is to improve the way the market is functioning, to get supply and demand together. That degree of structural unemployment, Congressman, that I talked about before is very much a function of people not having the right skills, at the right place, and at the right time, and not even knowing what skills they should get.

A system of broad skill competencies, voluntarily based, driven by the private sector but with educators involved, and also labor and others, provides a very powerful signaling device on both sides of the equation, both on the supply side and the demand side, as to what I need to get, what I could get, how I could signal that I have that particular training, and where the jobs are out there. It also helps employers have the same signal on the other side, in terms of where I can get the people I need.

Not long ago, I was talking to the president of a major computer company in the United States—and I do not want to overdo computers; this is not just futuristic. I asked him, “Where are the good jobs?”

In fact, it was much of the question that Chairman Ford asked a moment ago. If we are losing our middle class because the factory jobs are leaving, give me some examples of the kinds of jobs that a non-college graduate could do in your industry that would pay well, where there are shortages right now, and where there are jobs out there.

Without blinking an eye, this computer executive said, “We need people who are computer literate and are able to actually maintain and upgrade these machines. We also need a set of people who are able to provide customer service, which is very close to maintaining and upgrading. It is continuously offering advice and counseling to customers who buy these computer systems and need that kind of advice about how to utilize best those computer systems.” He said to me, “You don’t need a college degree to do this. Those people can be trained.”

The market is failing precisely in the way that I have been talking about. There is no credential. There is no way that people who need employment can see that there is indeed a field out there, and there is no way that people who need employees, who have that training without a college degree, can actually find the employees they need.

So we are not supplanting the market. The idea here is to simply fill in the gaps, which are growing before our eyes, in the skills people have or fail to have and what the market actually requires.

Chairman KILDEE. I know Mr. Miller will want to pursue this question further at some other time.

Mr. Roemer?

Mr. ROEMER. Good morning, Mr. Secretary. It is nice to see you up here once again. I think you have been here twice in less than a week. If we are going to solve some of the problems with retraining our workforce and reinventing and reinvigorating our education

system, obviously you are going to be a big part of that. So I hope we see a lot more of you up here.

Just last week, you and I talked very briefly at a Democratic caucus about the historic opportunity that we have coming before us. We do not need to get too fragmented in our approach to coming up with a solution to the school-to-work bill that we will be working on.

Hopefully, we will not get too fragmented on national service, school-to-work, elementary/secondary reauthorization, and school reform, so we can get a major piece of legislation that addresses many of the problems that this committee has talked about today.

One of my concerns, Mr. Secretary, is when will this board that we are talking about make some of the recommendations on credentials? What is our timing? Then what is our timing on a school-to-work bill?

Mr. REICH. The reason, Congressman, that this piece of legislation is here now and the reason that we chose to connect it to the education bill is twofold. It is partly because education and work do need to be tied together, and it is completely appropriate conceptually.

It is also because this is such a basic piece of the rest of the package that once you have in place the capacity to generate skill standards and develop skill standards, everything else becomes much easier because then you can mobilize community colleges, technical institutes, proprietary institutes. An awful lot of your training then begins to be focused in areas where you do need training.

Again, we view this as a basic building block. Sequentially, ideally, this has to start before all the rest of the pieces of legislation.

What I would like to do with regard to the rest, Congressman, is be back before the full committee within the next 4 to 6 months—and again, before I do that, I look forward to working with your staff and with you and having a lot of discussions about these—but with an omnibus, a much more comprehensive workforce reinvestment system, comprising all of the elements that we talked about before.

That is, assistance for workers who are laid off, in terms of getting new jobs. That is not categorical assistance, not dependent on the reason they were laid off. Combining that assistance with job counseling and also, critically, information about where jobs exist.

Integrating unemployment insurance with this job skill system. I do not want to bore you, but I could go on into another little 40-minute lecture about how the unemployment insurance system is really becoming somewhat obsolete, in an economy which is moving from a cyclical unemployment problem to a structural unemployment problem.

Then also a school-to-work system, as we talked about just a moment ago, with one-stop shopping to integrate all of these services.

Those are all pieces. Ideally, we would like to come back with a piece of legislation that had all of these pieces in it so that Congress would have the entire view. But this particular piece of the puzzle, on creating occupational skill standards, I believe is important. It may not, to the average person as we talk about it, sound

so exciting, but it is very important with regard to laying the foundation for everything that follows.

Mr. ROEMER. Let me give you an example of something that, over the weekend, happened in my district. I visited an elementary school that is applying for a grant to keep their school open 5 days a week until 8 o'clock at night and 1 day over the weekend. If they can get enough money in this grant, they can work through the neighborhood in integrated services, health care, adult education, and so forth.

One of their main areas of focus is not, as you mentioned, on downsizing IBM or Boeing or new job creation. It is to hone in on one specific skill of an adult to help them get a job, whether that be a computer skill, whether that be a math skill, whether that be a language skill. Six hundred people have been signing up for adult education at this one elementary school.

Will you support programs which would give grants to schools to use them in more innovative ways, especially in neighborhoods and in inner cities? Do you think that this one-stop shopping at a school, because it is already a viable place and safe place in most neighborhoods, is something that we can look at for retraining as well?

Mr. REICH. Congressman, the way we are envisioning it, the one-stop shopping place that is a career center would be available to anybody who has either lost a job or actually would like to upgrade their skills. It would have all the information——

Mr. ROEMER. What if we do not have a career center, and the school is already there?

Mr. REICH. The point I was going to make is that this center would be a place where people could get information about the availability of those adult education courses. Absolutely. The short answer to your question is: of course.

We have, in this country, a very good adult education system. We have, in this country already, proprietary schools all over. Many Americans are spending billions of dollars at proprietary schools, which offer training—some of it good, much of it not so good. We have a Federal system. We have a State system. We have all kinds of opportunities.

Again, people are very confused: What should I train for? What do I need? What are even the fundamentals I need? How can I show that I indeed have the training? What jobs are actually out there?

We need to take advantage of the resources already out there. It is not so much that we do not have enough resources. We do not have enough resources in certain areas, but we also have to create an information system so people can find out about the adult education and they know what kind of adult education they need, in terms of that particular job down the road.

Mr. ROEMER. My point—and this is it, Mr. Chairman—is that these schools can serve as the clearinghouse, as I think you envision, for getting information out to people and serving as a place where we educate people in all four of the ways that you have elucidated: downsizing, helping people that have lost jobs in middle level positions, new job creation through our competitiveness bill that we are working on in Congress now, and combining health

care and adult education and some of the new things that you are talking about. Thank you, and I look forward to working with you.

Chairman KILDEE. Mrs. Mink?

Mrs. MINK. Thank you, Mr. Chairman, and welcome, Mr. Secretary.

I heartily agree with all of your comments on the importance of undertaking this activity. The tragedy is, really, that 75 percent of our young people do not know, upon graduation, what they are going to do, what kind of a job they are capable of winning, what they can look forward to in the future, except perhaps initially some dead-end job. Emphatically, the development with industry and with the labor people and educators, some definition of what job skills are required for the huge array of potential job opportunities in our market is critical.

My problem, I think, stems also from what Congressman Miller was saying. I find it difficult, with all the support that I feel for this legislation and its importance, to make the connection with the bill to which it is now attached, and that is the elementary and secondary education reform concept and the importance of providing quality education for our young people.

As I see the significance of your proposal, it is for those who are in the job market so that they can identify where it is their job potential is and what kind of training and education they need to have in order to get those job opportunities which are not dead-end but which have a potential for them to reach the top.

Putting this into this education/schools bill I find difficult, because there we are talking about what you ought to know in the third grade and sixth grade, and how we are going to measure the school's ability to deliver this educational content. When, in your title, you are talking about assessments and certification and all of that, it troubles me a great deal. I read into it and I connect those words with the other words that are in the primary legislation.

So I would like to ask, is the real effect of your proposal to stimulate the elementary and secondary schools to provide better education so that these young people not going on to college may prepare themselves better for such career opportunities which do not necessarily require a college education?

Having said that, if that is really the effect, then are we not saying to our elementary and secondary educators that they ought to find time for these skills development, and that the forum you are constructing, which is going to set up these skills, will have an impact on the kinds of educational programs that will be offered in elementary and secondary schools.

If they do not then, actually you are kicking the kids out of high school and saying, "Now you can look for the job category to which you are inclined. Now you must go on to higher education. Now you must go to a community college or a vocational college in order to get the credentialing so that you can qualify for a good job."

This is the confusion in our minds. How do you fit this in to an elementary and secondary school reform bill?

Mr. REICH. Congresswoman, let me just make two points. Hopefully, I can clear up some of the confusion.

First of all, the reason this is here is, we envision, as you and many others do, that in the new economy, education is a continu-

ous process. It must not and it cannot end at the age of 16 or 18 or 22. It is continuous. It is lifelong. That is simply the way the economy is now organized. People have to continuously re-skill, if not on the job then they have to have opportunities to re-skill and relearn outside the job.

Many people are going to be laid off, or they are going to lose their jobs, or they are going to change jobs. The average person will change jobs, six, eight, or 10 times.

Mrs. MINK. I have no problem with the retraining and the impact of that.

Mr. REICH. In terms of conceptually. That is why it is so closely tied in with the schools.

Point number two. Hopefully, these kinds of skill standards will provide an incentive and a stimulus—not only to schools but also to training institutes, to community colleges, to all institutions involved in developing learning—as to where are the jobs, what kinds of skills are necessary, in terms of fields of competence, that one must have.

Forty years ago or 30 years ago, it was possible to envision a career in either a factory or even a clerical career or typing. It did not pay very much, but it was a career. You could have, even in the high schools and training institutes, all over the Nation, courses in typing. In the new economy, typing has given way to word processing, and data processing has given way to the management of computer databanks.

In the old days, we simply knew that there was an occupation called typist or clerk/typist, and you either had the skill or did not have the skill. It was fairly easy to convey whether you had the skill or didn't have the skill. Now we are in a new economy in which it is much more difficult to convey whether you have a skill.

By having skill standards, you are indeed, as you said, providing a stimulus and a direction to all kinds of institutes as to what kinds of learning and competencies are useful, not specific competencies that are going to become obsolete but broad-based competencies that are going to be useful in the economy of the future.

Mrs. MINK. After this bill becomes law, what distinguishing features will a high school graduate have, in terms of his or her skills, that a high school graduate does not now generally have?

Mr. REICH. I would hope—and here, again, this is a matter of speculating on the kind of effect that this signal will have if we did have 15 or 20 broad areas of skill standards, areas of competency, that did indeed reflect where the economy was evolving and also the kinds of new jobs that were out there for people who did not or could not get a college degree, I would expect that high schools would begin to adapt their curricula in the following ways.

For one thing, I would expect that high schools would provide greater emphasis, particularly in the junior and senior years, on particular skills that undergird all of these new occupations. That is, number one, critical thinking, the ability to think and ask questions, how to solve problems and identify problems, work collectively in a group or work independently. All of these new skills are necessary as a baseline.

Second, I would expect and hope that high schools would begin to combine, in the eleventh and twelfth grade, opportunities for

young people to actually experience the world of work and provide a bridge, just the beginnings of a bridge, not only for those kids who are not going on to college but for all young people, a bridge which might even carry over to a thirteenth year, a bridge that would blend some work experience and some school experience.

Secretary Riley and I have talked a great deal about this. We still are not prepared to propose a particular apprenticeship or school-to-work curricular plan. We are working very closely with many groups on this subject. It is a very complicated subject. Hopefully, we will have something here soon.

The point that you are raising and the point that I want to respond to is the signaling effect that having skill standards might have, ideally, upon all kinds of institutions, signaling where those jobs are and what those skills might be.

Chairman KILDEE. The Chair is going to have to enforce the 5-minute rule, because there is a number of people here.

Mr. Goodling, do you have a question?

Mr. GOODLING. I will wait.

Chairman KILDEE. Mr. Green?

Mr. GREEN. Thank you, Mr. Chairman.

Like all my colleagues, Mr. Secretary, it is good to see you here again in a visit before the committee. I like the idea of the Department of Labor and the Secretary of Labor working with an education issue, because as you said, we hope it will carry forward to where we are training our young people for jobs that will be there.

I like the ideas of the bridge from school to work and the higher-order thinking. I know a lot of our elementary and secondary schools are going to that in curricula around the country, to actually teach problem-solving instead of just manual skills.

One of the concerns I have and the reason I am glad you are here is, sometimes in government, whether it be State or Federal Government, the right hand does not know what the left hand does. That is what is good about having education and labor actually sitting together and talking about those issues.

One of the concerns I have is, in speaking of that right hand over the left hand—and you will get a letter in the next few days—is that we found in Texas, and particularly in Houston, that the Department of Labor has listed some critical occupations that are allowing, for example, imported workers to come in. Yet, our Texas Employment Commission actually has applications on file for these particular ones. These are not semi-skilled or skilled jobs; these are college degrees.

A good example is, the Department of Labor shows a shortage in biologists, for example. Yet, in Houston, we have 23 applicants for biologists and 331 statewide. We still have lots of chemical engineers, because we are still having problems with placing some of the folks. We graduate a lot of chemical engineers, but the Department of Labor says there are not enough qualified, yet chemical engineering, design engineering, in Houston alone, we have 222 that have filed with the TEC, our Texas Employment Commission, and almost 400 statewide.

I think maybe we might look at these. These are high tech jobs. I hear, even in Houston, the number of people who are losing these jobs to imports, whether we are transferring those jobs overseas or

bringing foreign nationals here to work. It is so apropos that you are here today, when this has been an issue that has been discussed, at least in Houston in the media, for about the last 3 or 4 days. You will get more information on it.

I would like to see you here to talk about that, because we need to continue that effort. I also think that within the Department of Labor, we might need to look at what jobs we do not have people there now but there actually are. I am sure that could happen in any part of the country, much less Texas.

Mr. REICH. Thank you, Congressman. I will look into those specific examples you gave me. As you know, the Department of Labor indeed does certify, with regard to immigration, areas of labor shortages. It has been doing so for many years. It is authorized, indeed required, by law to do that. I will check in those particular areas.

Mr. GREEN. We will follow up to you with the information we have.

Chairman KILDEE. Mr. Sawyer?

Mr. SAWYER. Thank you, Mr. Chairman.

Mr. Secretary, I am glad you are here, and I am looking forward to being able to get you back to work in fairly short order.

The topics that you have talked about today are particularly telling when you talk about signaling, creating the market for skills. At almost every point, we talk about building linkages. In the first section of this title, particularly section 5 and section 9, 401(a)(5) and 401(a)(9), there is a discussion of one element of this undertaking that is of particular concern.

Even if we do an ideal job of education reform in the first 76 pages of this measure and prepare ourselves well from page 77 on, we will have somewhere between 75 and 80 percent of our workforce out there with skills that go uninventoried and uncertificated and for which there will be a very difficult market match as we see the economy shifting.

To give you one example, the kinds of skills it takes to weld nuclear propulsion systems for attack submarines, we may need one or two more of those but we are not going to need large numbers of them. Yet, those skills are extraordinary in their quality. Trying to build first a certification and a match between not just welding but welding of a very special character and the applications they may have throughout a complex economy, it seems to me to be one of the largest challenges that you face.

Do you have any thoughts about how the techniques that are described in Title IV can be applied to that 80 percent of the workforce for whom that credentialing and match process is perhaps more critical than anybody else in the labor force today?

Mr. REICH. Congressman, I take it you are referring to people who already have certain skills that are in demand?

Mr. SAWYER. Skills for which there is no inventory and for which there is no inventory of demand. There is probably a better inventory of demand than there is of existence.

Mr. REICH. I see no reason why the skills board could not, with regard to the encouragement and facilitation of all kinds of certification programs, encourage the certification of certain skills of the sort you referred to, which are not in great demand but necessary

that people at least have a piece of paper and be able to show in their job application that they have a certain competence.

Mr. SAWYER. Perhaps I was too specialized in my description. One of the talking points in vocational education is that we are developing too many welders of the kind that we needed in the 1950s. That is probably true, but the fact of the matter is that welding of one kind is not the same kind as high-demand welding is today.

If I take another arena, the use of composites in airframes is a very high skilled, highly specialized kind of job. Its applicability in modern fighter aircraft may not have a great deal of use in the next 8 years, but in automobile frames, in lightweight mass transit systems, there is enormous applicability.

There is a range of evolving skills that are in the workplace today that it seems to me we are having difficulty identifying and applying, using the techniques that you have described here. I think the techniques are enormously applicable, but I do not think there is a way to address that within the structure of the legislation that we have.

Mr. REICH. As you pointed out, section 401(a)(5) does provide or at least indicates, and there are subsequent sections, that in which the purpose would be to help workers obtain certifications of their skills in just the manner you talked about, both to protect against dislocation but also to pursue career advancement. The implication clearly is the continuous upgrading of skills of all sorts.

I would not envision that the board, as part of its mandate to develop a relatively small number—15 or 20 basic, broad skills competencies—would get into quite the detail you talked about with regard to composite materials, but those kinds of certifications could be built upon the basics.

For example, someone who wanted to upgrade a set of skills with regard to composite materials or with regard to advanced welding certainly could get, I expect and hope, a certification of a broad sort which permitted that person to prove that the person had some underpinnings of understanding of an industrial process and then could go on to get an even more advanced and specialized certification, not through the board so much but which might be stimulated by the board.

Let me take one step back here. The advanced welders or the people involved in composite materials today need to have skills that are more than the specialized skills that they might have of an advanced technical nature. Most often, they need to know and understand the system in which they are working. That system understanding requires a set of fundamentals, which many American workers, for one reason or other, through no fault of their own, simply do not have.

I had the privilege yesterday afternoon of spending an hour with Edwards Demming, one of the great men of management theory and a constant critic of American companies, a man who, almost singlehandedly, put Japan on the route that Japan is now on. Dr. Demming is a very old man.

I asked him, "What is it that we need to teach American workers and American employers? What is the learning that they are having the hardest time getting?" He kept saying, "They have to understand that they are working in a system."

"We have to get away from specialized knowledge. Yes, we need specialized knowledge," and I cannot imitate his voice; it is a growling, wonderful voice. He said, "We have to understand that everybody is embedded in a system and has some responsibility for making the entire system work."

Chairman KILDEE. Mr. Strickland?

Mr. STRICKLAND. Mr. Chairman and Mr. Secretary, thank you.

As I sat here this morning, my mind has literally been flooded with questions. I have had a lot of conflicting feelings because I see the very significant benefits of what is being attempted, and yet a lot of questions and potential problems concern me.

I am thinking about an effort to avoid a large bureaucracy, and yet I see, at least at this point, no way to avoid that. When I think of the assessment tools that must be developed, the repository of records, how to access those records on the part of those who would need them, the way the workforce changes, and the skills needed to do certain functions change, literally from month to month or year to year.

Part of my concern you just spoke to, when you were talking about your conversation with Dr. Demming. The skills we attempt to evaluate or test or assess or credential, in my mind, need to be somewhat general in nature because of the way the workforce needs to change so rapidly. I guess what I would like for you to speak to, if you could is, how do we avoid this bureaucratic structure that, at least where I am right now and listening to all this, I fear may be necessary in order to carry out this?

Mr. REICH. Congressman, the way we avoid it is to create a structure that actually enhances market forces, pushes the market in the direction that the market would eventually go anyway.

I keep referring back to supply and demand, market imperfections, people who need and want to get skills but do not know what skills to get, employers who need skilled people but do not know how to find them. This kind of a system, functioning as we think it would function, would link supply and demand without a bureaucracy. You do not need a bureaucracy to establish standards.

We have had, in this country, a history going back to the 1920s, of standards in industry which are simply there. They provide focal points, signals around which the private sector and other institutions rally. In fact, the beauty of a system like this is precisely that you do not need a bureaucracy.

What you have is a group of people, individuals, bringing to the table their respective insights and wisdom from business, labor, education, and so forth. They understand their mandate is to try to identify areas of potential skills, where people could get some broad areas of competence, where employers need a signal as to where they can get that area of competence.

That board would, in effect, allow and possibly provide some seed money for groups that are already developing these kinds of standards, these kinds of certifications and to other groups as well. This is going on all over the country already.

What this board does is, it ensures that everybody is at the table when these standards are being developed, and it ensures that the results are portable. You can move from State to State, and if you have that credential, you can show employers in the future that

you do have the credential. It would ensure that the assessments are not biased. It does not have to do the assessments themselves; it would simply endorse assessment processes as part of the overall skill standard system.

The beauty here is that this particular board has to do very little itself; it is simply giving an imprimatur, if you will, to a lot that is already underway and being done and encouraging the market to work in the way the market is already working. This is not a step in the direction of a bureaucracy.

There are only two alternatives to this. One is to do nothing and let the market function the way it is but, again, with higher and higher levels of structural unemployment and lower and lower levels of income for a lot of people who simply do not have the skills they need because they cannot get them, do not know where they can get them, or cannot afford a college education.

Alternative two is to establish a very complicated labor market system of the sort that you have in some countries, where you have government doing a lot of these things.

It seems to me that neither of those alternatives is one that we ought to choose. This is a minimalist approach. It sets a framework for the private sector, educators, and others to rally around.

Mr. STRICKLAND. Thank you, Mr. Secretary.

Chairman KILDEE. Mr. Payne?

Mr. PAYNE. Thank you very much, Mr. Secretary. It is always a pleasure to see you and listen to your theories. It is great to take your academic background and merge it here with the reality. Hopefully, it will all click.

I just have a concern about the opportunity to learn standards. I strongly support standards and goals. I think it makes a lot of sense to be able to have standards where certificates can be portable, as you mentioned, taken across State lines. I have seen education fail students, in particular in urban centers—cities like Newark, where I live and grew up.

When we then talk about statewide standards, we always find that the majority of the youngsters who are at the bottom of the standards or the tests are from those urban areas. Those who do well, of course, are from the Princeton and the far hills and those places in our State.

I just wonder how we are ever going to change these two societies that was talked about in the Kerner Commission report. How are we ever going to ensure that there is an opportunity to learn. The kids fail, but the schools fail the kids. The kids, of course, are the victims.

I know that you have set up a board of 20 people, but once again, you do have five set aside for public, parents, and civil rights people, but the other 15 are heavyweights: educators, bureaucrats, standards measurement experts, business people. You need that, but I see the advocate group being submerged because of the preponderance of others.

Be that as it may, I just wonder how we are ever going to be able to bring these two societies together and have some incentive for a society to attempt to provide for those in the inner cities in order to perform on standardized tests.

Mr. REICH. Congressman, as you are aware, better than I, we are developing a two-tiered economy right now. Our major cities are composed of two kinds of work, broadly speaking.

They are the people who work in the glass and steel towers downtown, including managerial, professional, and technical workers, most of them with college degrees. Then you have a very large number of service workers, who are either working in custodial occupations or clerical occupations in those glass and steel towers or working at street level, in retail, restaurants, hospital, and hotel occupations requiring very little skill.

The gap between the two populations, the college-educated managerial, professional, and technical and the non-college educated is growing sociologically and growing in terms of salary, wages, and compensation.

How are we going to overcome it? The first step, it seems to me, with regard to all of the topics we are talking about today, is to ensure that the schools available to inner city populations, schools available to the children of people who are disadvantaged, are good schools.

As the Secretary of Labor, there is not all that much I can do directly, but I have been working very closely with Secretary Riley, who is absolutely committed to this. The President is absolutely committed to this. We will work with you and do everything we possibly can do to ensure that all children have access to the best kind of education they possibly can.

Beyond primary and secondary school, we have to ensure that there are avenues of upward mobility for young people who cannot afford or otherwise will not go on to college. What worries me is that a 4-year college degree is becoming the parchment separating the two classes of our workforce.

One of the purposes of this kind of legislation is to create new avenues of upward mobility so that the non-college bound or the non-college graduate can aspire to gaining good skills for good jobs at good wages.

Mr. PAYNE. Thank you very much.

Chairman KILDEE. Mr. Engel?

Mr. ENGEL. Thank you, Mr. Chairman, and welcome, Mr. Secretary. I agree with what you have said, in terms of skill standards. I think it is very important to have minimum standards in the labor force. I commend you on your work and leadership.

I can think of no two things that go better hand in hand than education and labor. Unfortunately, for far too long, we have overlooked this important connection.

I represent a combination of an inner city district and a middle class district in the Bronx, New York, which is located in New York City, and some of the suburbs to the north of the city. I was very disappointed that the Senate did not pass the President's stimulus package, because certainly the New York City economy desperately needs stimulus, with 10 percent unemployment and a lack of jobs for the people, especially for our youth.

I had an interesting conversation with President Clinton shortly after he was elected. I am a big believer in the fact that as we downsize our military, we have a number of people who could serve

as role models, to come into the inner cities and work with our youth and families.

I am wondering if you could comment. Have there been discussions on such a program? I think that using displaced defense and military personnel in this manner would be a wonderful program. As we are establishing national goals, I think that we should look at putting this in the program.

Mr. REICH. Yes, Congressman, there have been discussions. There is an enormous pool of talent out there. As you know, the military has served as one of our major training centers, avenues of upward mobility for many of the young people who otherwise would not have that kind of avenue of upward mobility.

Many of the military skills—unfortunately, not all, and perhaps not even a preponderance—are applicable in the civilian sector. There may be ways of utilizing those skills in our schools and also with regard to all kinds of publicly related needs, if those people cannot otherwise find jobs. I think that part of our military reinvestment strategy is looking at precisely that set of issues.

Mr. ENGEL. Thank you.

Chairman KILDEE. Mr. Secretary, we deeply appreciate your testimony here today. We look forward to working with you on this and other matters pending before this committee. Thank you very much, Mr. Secretary.

Mr. REICH. Thank you, Mr. Chairman.

Chairman KILDEE. Our next panel consists of Mr. Rob Hall, Vice President, Government Affairs Council, National Retail Federation, Washington, DC; Dr. Sam Meisels, Associate Dean for Research and Professor, University of Michigan School of Education, my alma mater; Dr. Janice Earle, Office of Systemic Reform, National Science Foundation, Washington, DC; and Dr. Linda G. Morra, Director, Education and Employment Issues, General Accounting Office, Washington, DC.

If you will come forward, you may summarize your testimony, if you wish, and your full testimony will appear in the record.

Mr. GOODLING. Mr. Chairman, may I say that one of the important reasons for Mr. Hall being here is, he is with the National Retail Federation, and the industry has received a skill standard grant from the Department of Labor. That is why we think it is important that he talk about that.

Chairman KILDEE. We appreciate that, and we know several of our witnesses have very tight schedules. Feel free to vacate when you have finished your part, if you have to. We can submit questions to you in writing. We really appreciate your patience this morning. The Secretary was put on at the last moment, but in the nature of things here in Washington, that does happen. We appreciate your patience.

Mr. Hall?

STATEMENTS OF ROBERT HALL, VICE PRESIDENT, GOVERNMENT AFFAIRS COUNCIL, NATIONAL RETAIL FEDERATION, WASHINGTON, DC; SAMUEL J. MEISELS, ASSOCIATE DEAN FOR RESEARCH AND PROFESSOR, UNIVERSITY OF MICHIGAN SCHOOL OF BUSINESS, ANN ARBOR, MICHIGAN; JANICE EARLE, OFFICE OF SYSTEMIC REFORM, NATIONAL SCIENCE FOUNDATION, WASHINGTON, DC; AND LINDA G. MORRA, DIRECTOR, EDUCATION AND EMPLOYMENT ISSUES, GENERAL ACCOUNTING OFFICE, WASHINGTON, DC

Mr. HALL. Thank you, Mr. Chairman, Representative Goodling, and members of the subcommittee. On behalf of the National Retail Federation, I am pleased to have the opportunity today to speak to your committee about an area of increasing national importance in our schools, in our workplaces, and in the lives of the young men and women who are entering the workforce every day.

I am talking about skill standards. For far too long, educators and business people have scratched their heads and said, "What are we going to do about education? How are we going to better train our young people? How are we going to find better qualified applicants?"

Mr. Chairman, the establishment of voluntary industry-based skill standards will be a first step in the right direction—the right direction for the business community to communicate to our Nation's education and training systems what kind of skills we expect our applicants to have.

There are any number of ways you can go about developing skill standards. You can make it an academic exercise, you can impose standards from the top down, or you can go where skill standards will be used every day—the workplace.

Since December, the National Retail Federation has been working on a Department of Labor funded project to develop, implement, assess, and certify job skill standards. We believe that our approach is one that begins at the workplace, with retail employees as well as employers. Our Grant Management Committee is made up of retail employers, employees, union representatives, educators, and job training experts. I am pleased today to have with me Kathryn Mannes, the project's coordinator.

Our project puts educators and industry leaders at the table together, with both sides clearly listening. In fact, after this testimony, we will be leaving for our second Grant Management Committee meeting, which is hosted by DECA, the Distributive Education Clubs of America, as part of their annual conference. Prior to meeting on skill standards, the committee has been invited to observe the DECA competition for 10,000 marketing education students and to meet with the DECA National Advisory Board to identify skills most wanted in a retail employee.

A creative and comprehensive job/task analysis process has been designed to encourage as much industry participation as possible. The project crosses industry sectors and size barriers. Last week, retail workers from stores ranging from two to 2,000 employees participated in two full-day DACUM sessions to chart what they do in their jobs. Workers discovered major similarities, for example, in

how employees of a large department store are encouraged to mimic the autonomy of the small shopkeeper.

We expect to have preliminary job skill standards established for the "Career Sales Associate," the largest category of retail employees, by the end of this project year. Momentum and enthusiasm for the project are growing, and we are excited about the potential. But we are concerned about raising the expectations of the industry and making sure standards will be used. To guarantee that these standards will be implemented, industry must continue to take the lead in the assessment and certification phases of the process.

Our approach has been to collect data in a way that will be assessable and to prepare the industry for a continued commitment, not just to piloting the standards but to the education and training that will back them up. In essence, our goal is to have as much industry "buy in" as possible.

Now to the legislation that is at hand today. We support the proposed legislation as long as industries—and here I mean employers, employees, and their training providers—can continue to take the lead in developing their own voluntary standards.

There is much to praise in H.R. 1804. The purposes of the legislation are squarely on target. The legislation identifies all the appropriate stakeholders that should be involved in the development of skill standards. The idea of a national board is a good one in theory, so long as the board serves in a somewhat reactive mode and gives stamps of approval to those partnerships that have successfully developed skill standards. We envision a national board that would validate skill standards developed by industry partnerships of business, education, and labor.

While the retail industry is generally supportive of the goals and ideas of the proposed legislation, we continue to have some concerns about the potential problems H.R. 1804 could create for retail employers, employees, and others. Today, we are a committee of retailers, union representatives, job training experts, and educators, working together to develop and test voluntary industry-based skill standards.

Under the scheme outlined in H.R. 1804, a national board will endorse standards that industry and others determine through yet undefined broad clusters of major occupations. Would the retail industry be considered a cluster? Or would we have to redo our work with others in the service industry?

On the all-important subject of industry "buy in," we fear that the retailers we have brought to the table, and we now have over 25, would be less interested in a national skill standards project headquartered here in Washington, staffed with detailed employees from the departments of labor and education. The present role of the departments of education and labor, serving as industry catalysts and providing seed grant money, has been largely successful.

If that role could continue under the new board, then most of industry's concerns would be lessened. However, the fear in the business community—and this goes beyond the retail community—is that the national board would divert the development of skill standards away from employers, employees, and training providers. For skill standards to work and to have real meaning, the individ-

uals who will be using them—employers, employees, and training providers—need to be involved at every stage of the process.

Also from our reading of the legislation, there is still some lingering concern about the voluntary nature of the standards. We believe that can be cleared up with appropriate language and realize that the intention of the drafters is to make the skill standards voluntary.

In closing, I want to applaud the efforts of the departments of labor and education for their hard work on this legislation. I particularly want to mention Secretary Reich and his staff. They have reached out to the employer community and have already responded to a number of the concerns we have raised. We stand ready to work with him, the Department of Education, and members of this subcommittee in furthering the efforts of developing skill standards to assist the American workers of tomorrow reach their career potentials.

[The prepared statement of Robert Hall follows:]

STATEMENT OF ROBERT HALL, VICE PRESIDENT, GOVERNMENTAL AFFAIRS COUNSEL,
NATIONAL RETAIL FEDERATION

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Mr. Chairman, the establishment of voluntary, industry-based skill standards will be a good first step in the right direction—the right direction for the business community to communicate to our Nation's education and training system what kind of skills we expect our applicants to have. There are any number of ways that you can go about developing skill standards. You can make it an academic exercise, you can impose standards from the top down, or you can go to where skill standards will be used every day—the workplace.

Since December, the National Retail Federation has been working on a Department of Labor funded project to develop, implement, assess, and certify job skill standards. We believe that our approach is one that begins at the workplace . . . with retail employees as well as employers. Our Grant Management Committee is made up of retail employers, employees, union representatives, educators, and job training experts. I am pleased to have with me today Kathryn Mannes, the Project's Coordinator.

Our project puts educators and industry leaders at the table together, and both sides clearly listening. In fact, after this testimony, we will be leaving for our second Grant Management Committee meeting which is hosted by DECA, the Distributive Education Clubs of America, as part of their annual conference. Prior to meeting on skill standards, the committee has been invited to observe the DECA competition for 10,000 marketing education students, and to meet with the DECA National Advisory Board to identify skills most wanted in a retail employee.

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certification phases of the process. Our approach has been to collect data in a way that will be assessable, and to prepare the industry for a continued commitment not just to piloting the standards, but to the education and training that will back them up. In essence, our goal is to have as much industry "buy in" as possible.

Turning to the legislation which is the subject of today's hearing, we support the proposed legislation as long as industries [employers, employees, and their training providers] can continue to take the lead in developing their own voluntary standards. There is much to praise in the current draft of H.R. 1804. The purposes of the legislation are squarely on target. The legislation identifies all of the appropriate stakeholders that should be involved in the development of skill standards. The idea of a national board is a good one in theory, so long as the board serves in a somewhat reactive mode and gives stamps of approval to those partnerships that have successfully developed skill standards. We envision a national board that would validate skill standards developed by industry partnerships consisting of business, labor and education leaders.

While the retail industry is generally supportive of the goals and ideas of the proposed legislation, we continue to have some concerns about the potential problems H.R. 1804 could create for retail employers, employees, and others. Today, we are a committee of retailers, union representatives, job training experts, and educators, working together in effort to develop and test voluntary industry-based skill standards. Under the scheme outlined in H.R. 1804, a national board will endorse standards that industry and others determine through yet undefined broad clusters of major occupations. Would the retail industry be considered a cluster? Or would we need to redo our work with others in the service industry?

On the subject of the all-important industry "buy in," we fear that the retailers we have brought to the table [and they now number over 25] would be less interested in a national skill standards project headquartered here in Washington, DC staffed with detailed employees from the Departments of Education and Labor. The present role of the Departments of Education and Labor serving as industry catalysts has been largely successful. If that role could continue under the new Board, then most of industry's concerns would be lessened. However, the fear in the business community, and this goes beyond the retail community, is that the national board would divert the development of skill standards away from employers, employees, and training providers. For skill standards to work and to have real meaning, the individuals who will be using them—employees, employers, and training providers—need to be involved at every stage of the process.

From our reading of the legislation, there is still some lingering concern about the voluntary nature of the standards. We believe that can be cleared up with appropriate language and realize that the intention of the drafters is to make the skill standards voluntary.

In closing, I want to applaud the efforts of the Departments of Labor and Education for their hard work on this legislation. I particularly want to mention Secretary Reich and his staff. They have reached out to the employer community and have already responded to a number of the concerns we have raised. We stand ready to work with him, the Department of Education, and members of this committee in furthering the efforts of developing skill standards to assist the American workers of tomorrow reach their career potentials.

Chairman KILDEE. Thank you, Mr. Hall.

Dr. Meisels?

Dr. MEISELS. Chairman Kildee, Mr. Goodling, and members of the subcommittee, thank you for inviting me to speak with you today.

Without being overly dramatic, I want to begin by noting that we are poised at an important moment in history. Because of the attention devoted to readiness by the first national education goal, because of the renewed national commitment to helping young children begin school well, because of the need to find new ways of assessing young children due to the failure of past methods, we are in a position to alter the way that early childhood assessment takes place and to improve children's chances for school success.

I want to take a few minutes today to talk about what we mean by readiness and to relate this to issues of assessment as they fit into H.R. 1804.

Children are frequently described as ready or not ready, as if readiness were something within the child, something you can have, an entity of some sort. But readiness is not an ability, although it certainly reflects higher order mental activity. It is not a gene, a chromosome, or any other such thing.

In contrast to this approach, the view of readiness that I hold is that it is bidirectional: it focuses both on children's current skills, knowledge, and abilities and on the conditions in which they are reared and taught. Since different children are prepared for different experiences, and children respond differently to apparently similar environmental inputs, readiness must be seen as a relative term.

It can be applied to individual children, but it is not something in the child, and it is not something in the curriculum. It is a product of the interaction between children's prior experiences, their genetic endowment, their maturational status, and a whole range of environmental and cultural experiences that they encounter.

Not only is this a restatement of what we mean by readiness, it has some major implications for what we can do with early childhood assessment.

Readiness is usually measured by means of group administered, objectively scored, norm referenced paper and pencil tests. Millions of these tests are administered to young children every year. The content of these tests is unfamiliar or uncomfortable to many children. They are highly abstract. They are generally very verbal, and they have many biases against children who have not experienced these sorts of things before.

Children taking these tests are assessed on isolated skills, in settings devoid of context, rather than being evaluated on familiar tasks, in natural settings in which they are asked to use what they know and have had experience with previously.

There is an alternative to this. The alternative is performance assessment. Even though here I am talking about education at the outset of school, I was interested to hear Secretary Reich talk about performance assessment at the other end of the educational spectrum as well.

Performance assessments are methods that permit students to demonstrate their knowledge or skills through solving problems, doing mathematical computations, writing journal entries or essays, conducting experiments, presenting oral reports, or assembling a portfolio of representative work.

This form of assessment emphasizes recording children's classroom performance, documenting teachers' activities, and understanding and interpreting children's work. No other approach to measuring readiness can focus so clearly on what the child brings to the learning situation and what the learning situation brings to the child.

The technical advisory panel for the first national education goal cited four sources of information to be used as part of the assessment of progress toward this goal. These sources of information are consistent with the type of performance assessment I just described, and they include the following.

One, parent reports regarding health, child development, and child rearing practices. Two, teacher reports: that is, systematic in-

formation on child performance in the classroom. Three, a profile of children's skills that is an individually administered developmental inventory. Four, a performance profile of performance portfolio that represents a highly contextualized view of child activity.

These four sources are intended to tap five dimensions of learning and development, and I will just briefly mention them so you will see the breadth of this: Physical wellbeing and motor development, social and emotional development, approaches toward learning, language usage, cognition, and general knowledge.

Never before have we sought to assess children on as large a scale as this. Never before has the U.S. Government contemplated an assessment of early childhood development as multifaceted as this. Hence, our technical panel also recommended the establishment of an oversight group, a National Commission on Early Childhood Assessment.

The purpose of this commission would be threefold. One, to assist in tracking progress toward the accomplishment of the first national education goal; two, to oversee the development of an early childhood assessment system, consistent with the principles I have been articulating here; and three, to ensure that the assessment is used to improve practice so that more children are successful in school.

I urge you to give consideration both to the establishment of this commission and to endorsing the broad outlines of the assessment program I have suggested to you. Thank you very much.

[The prepared statement of Samuel J. Meisels follows:]

TESTIMONY

Provided to the

Subcommittee on Elementary and Secondary Education,
Committee on Education and Labor of the House of Representatives

Samuel J. Meisels
Associate Dean and Professor
School of Education
University of Michigan

May 4, 1993

ASSESSING READINESS

Most readiness and early school achievement instruments are group-administered, objectively-scored, paper and pencil tests that are of limited educational value. Their content is generally abstract, verbally-mediated, and potentially biased against children unfamiliar or uncomfortable with middle class manners and mores. Children taking these tests are assessed on isolated skills in settings that are devoid of context, rather than being evaluated on tasks in natural settings in which they are asked to use what they know and have had experience with previously. The entire test-taking experience is dominated by "filling in bubbles, moving the marker, making sure that everyone is in the right place. These activities may be related to test taking, but they have very little to do with reading" or the skills that are supposedly being tested (Stallman & Pearson, 1990, p. 38).

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Reading, mathematics, and language are not learned or assessed well in a decontextualized fashion. They are mastered in context. Yet, those who construct these tests persist in testing isolated skills out of context in part because of the belief that such tests are more "objective" than assessments that are situated in the lives of children's daily activities. How "objective" these tests are is highly questionable. Moreover, if one wishes to draw valid conclusions about a student's profile of strengths and difficulties, one would have difficulty using the data from these tests. They may inform us that a child does not have strong letter knowledge, but they cannot tell us which specific letter the child knows or does not know. They may tell us about a child's overall ability to recognize shapes, objects, or sound-symbol combinations, but they will not be able to tell us how children combine these elements into the intellectually more demanding tasks of reading. The justification for using standardized, group-administered achievement tests for children below Grade 3 is very dubious and questionable.

It is time for us to make a transition to an alternative paradigm: Performance Assessment. Performance assessments are methods that permit students to demonstrate their knowledge or skills through solving problems, doing mathematical computations, writing journal entries or essays, conducting experiments, presenting oral reports, or assembling a portfolio of representative work. Nearly every state in the nation has begun to experiment with some form of performance assessment for obtaining achievement data in high school (U.S. Congress, Office of Technology Assessment, 1992, p. 5), and some states (e.g., Michigan and Vermont) have mandated that some performance data be collected on all students at various points in their school careers.

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Performance assessment, also known as "authentic assessment," is a method for documenting children's skills, knowledge, and behaviors using actual classroom-based experiences, activities, and products. Although uniformity concerning the principles of performance assessment does not exist, there are several features that are common to various approaches to performance assessment. First, performance assessment documents children's daily activities; it does not simply provide a "snapshot," or a discontinuous view of children's accomplishments. Second, it provides an integrated means for evaluating the quality of children's work. This work is collected in a manner that bridges and integrates the broad range of curriculum areas and engages children in the meta-cognitive task of evaluating their own learning. Third, performance assessment is flexible enough to reflect an individualized approach to academic achievement. Although performance assessments should be based on well-thought out values and systematic standards of knowledge and curriculum development, the actual implementation of these values and standards can be adjusted in relation to a specific classroom, teacher, and child. Finally, performance assessment is intended to evaluate those elements of learning and development that group-administered achievement tests do not capture very well: analysis, synthesis, evaluation, and interpretation of facts and ideas -- the so-called "higher order thinking skills" -- as well as student initiative and creativity.

Group-administered tests have been a part of the educational scene for nearly a century. Performance assessment can make no such boast. Indeed, relatively little evidence is available to demonstrate the effectiveness of performance assessment. However, performance assessment is particularly

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appropriate for use with preschool and early elementary school children. These children are in the midst of extraordinary shifts developmentally, shifts that are difficult or nearly impossible to capture adequately on one-dimensional assessments that offer few choices and that dictate both the method and the timing of response. Such essential elements of performance assessment as developmental continuity, expanding the repertoire of response, and assessing children directly within the context in which they are learning renders them particularly suitable for use with young children.

In particular, performance assessment provides us with an opportunity to understand more about children's readiness. At its heart, readiness is interactional, including a dual focus on the child's status and on the characteristics of the child's educational setting. These two foci are essential to performance assessment. Indeed, this form of assessment is based on using teachers' perceptions of their students in actual classroom situations while simultaneously informing, expanding, and structuring those perceptions; it involves students and parents in the learning and assessment process, instead of relying on measures that are external to the classroom and family context; and it provides for genuine accountability that systematically documents what children are learning and how teachers are teaching. Central to all of these elements is the emphasis on recording children's classroom performance, documenting teachers' activities, and understanding and interpreting children's work. No other approach to measuring readiness can focus so clearly on what the child brings to the learning situation and what the learning situation brings to the child. Where these two are joined, readiness can be studied, assessed, and nurtured, and the assessment process itself can contribute positively to children's development.

Chairman KILDEE. Thank you very much, Doctor.

Dr. Earle?

Dr. EARLE. Good morning, Mr. Chairman and members of the subcommittee. I appreciate the opportunity to testify before you today regarding the National Science Foundation's Statewide Systemic Initiatives Program.

For about the last 2 years, the Foundation has been engaged in a major reform effort with States to improve mathematics, science, and technology education. The idea here is that the Foundation works in partnership with the States. We do not tell them what to do or how to do it. We are there to be a catalyst, with some dollars to start them up, and then to work closely with them over the 5 years that they have awards from the Foundation.

As of this moment in time, we are working with 20 States and the Commonwealth of Puerto Rico. Next week, we expect to make five more awards to five additional States so that we will end up working with about 26 in this program. States have about 5 years and roughly \$2 million per year to work with the Foundation in making the kinds of comprehensive reform changes we envision.

The Foundation uses a competitive, merit-based review system to decide which States get awards under this program. That has been a very interesting process for all of us.

What we found is that all 50 States have participated in some way with us in this program, either through submitting a preliminary proposal to us, submitting a full proposal to us, or in being selected for the last stage of the review process, which is a site visit, where teams of outside experts go onsite and take a really close look at what the States say they are going to do and try to figure out if that in fact is what they are going to do and whether they have the capacity to do it.

We have some criteria that we are very interested in, when we go out there and take a look at States and review their initiatives. It has to do with things like the degree to which they have some real commitment to reform mathematics and science education, to what degree are they willing to focus their resources, to what degree are they willing to come up with some new resources, to what degree are they willing to coordinate what they already have.

We are very interested in their vision of mathematics and science education reform. The National Science Foundation cares a great deal about content issues. We are very interested in States that want to implement national standards, and create State standards that reflect the national standards.

We are interested in States that develop assessment systems that are aligned with those standards and that are moving toward performance-based and less toward the multiple choice, fill-in-the-blanks kinds of tests. We are interested in States that can figure out how to address the equity issues, so that all kids have an opportunity to have the best kinds of content and curriculum and teaching available.

We are very interested in States' willingness to take a look at policy reform and to help school districts and schools figure out how to be more flexible so that the kind of teaching and learning we want to see is more likely to take place. We are interested in

the degree to which States have a strategic implementation plan that makes sense, given their culture and their context.

We have learned a lot of things in the last 2 years about this systemic reform business, I think. Let me just tick off a few of the things that I think we have so far.

The first has to do with phase-in. This takes a lot longer than we thought. We started out giving States full awards. I think we would do a planning or a phase-in period, if we had to do it over again. It takes a lot of time to get the right staff on board, to get the subcontracts operating, just to get the whole consensus process together, longer than we thought.

I think the flexibility in the way the National Science Foundation has worked has been a real advantage here. The governor's office decides who responds to our RFP, and we have had lots of different places in the education system take the lead. We have had State departments of education take the lead, we have had universities take the lead, we have had boards of regents, and we have independent councils or agencies, such as the Montana Council of Teachers of Mathematics. There is no set rule about where the energy or activity or ideas come from. We let the States figure that out and then tell us how they are going to put it together.

I think we have learned a lot about partnerships. Of course, they all say they have partnerships when they submit the proposals. But it is like marriage: it is easy to start up and hard to maintain.

One of the things I think we are really going to be looking at over the next couple of years is how you maintain these partnerships, keep them from drifting back off into the turf, and the rivalry we all know is there in every political system and at every level. We do not know how to do that, but I think we are going to keep an eye on it. We know we need to watch it.

The notion of focusing resources has been an interesting one. I think the foundation agrees that \$10 million, which is the total amount available through this program, in the large population States does not buy you a great deal. Yet, it is very interesting that these States have been anxious to compete for it.

I think the reason is that the money is flexible. They can spend it on teacher development, they can spend it on curriculum development, they can spend it on developing new assessment systems, and they can spend it on public information and public awareness. One of the reasons that this has been so successful is that it is very uncategorical in its approach to things.

One of the things we found out through this program is that the capacity and the infrastructure for the kind of reform in math and science education that we have been thinking about at the Foundation, the capacity is not really there in the way that we would like to see it. I think partly that is because of budget cuts, and staffs have really been stripped down.

I think one of the things we are doing through this program, and this is the result so far, is really creating new kinds of leadership. I think the program is creating new kinds of leadership, leadership that, hopefully, will last long after the funding is no longer there.

Let me make one final point here, and that has to do with the absolutely critical importance of providing technical assistance to the States in efforts of this kind. It has to do with the capacity

issue that I talked about a little bit before. Nobody knows how to do this exactly, including those of us at the Foundation and at other places at the national level and at the State level and at the district level.

I think the whole process is a learning experience. It is one in which we work together to try to figure out whether the systemic strategy idea, which seems to be a very powerful notion, can really result, in the long run, in better achievement of kids. Since we do not know exactly how to do it, I think it is very important to stay a little bit loose, until we know more than we know now about what works and what doesn't work and what combinations of things work.

There is a lot of technical assistance that has to go on with this kind of an effort. The National Science Foundation has a contract out for 5 years, which is a good part of the life of this program, which will be trying to get the best experts in the country and making them available to people in the States so that they can learn from each other about how to go about the system reform initiatives that we have going.

As a systemic effort designed to make fundamental reforms, this program is, understandably, a little bit high risk. Nevertheless, I think our preliminary evidence, based on the first 2 years, shows that we are getting the kind of participation in the States that we had hoped. It is resulting in the leveraging of resources. The NSF dollars in fact are attracting other State and local dollars out there. As a group, I think that these projects will provide us with a great deal of information about systemic reform for the whole country.

Thank you so much for letting me describe our systemic effort, which is targeted at improving mathematics and science education. I will be glad to answer any questions you may have.

[The prepared statement of Janice Earle follows:]

NATIONAL SCIENCE FOUNDATION
1800 G STREET, N.W.
WASHINGTON, D.C. 20550

Testimony of
Dr. Janice Earle
Office of Systemic Reform
National Science Foundation
before the
Subcommittee on Elementary, Secondary, and Vocational Education
Committee on Education and Human Resources
U.S. House of Representatives
Washington, D.C. 20515

May 4, 1993

Mr. Chairman, and members of the subcommittee, I appreciate the opportunity to testify before you today regarding the National Science Foundation's Statewide Systemic Initiatives Program.

The Statewide Systemic Initiatives (SSI) Program is a major effort by the National Science Foundation (NSF) to encourage improvements in science, mathematics, and engineering education through comprehensive systemic changes in the education systems of the states.

Working with states on issues related to K - 12 education represents a new strategy for NSF. Traditionally the Foundation has worked with university-based researchers through grant awards. The SSI program, however, is one where the Foundation works in partnership with states to implement reforms so that the elements of the system operate in a more coherent and productive fashion. Through a competitive, merit-based review process, states are eligible to receive up to 10 million dollars over five years. It is expected that through the policy-making process, state leaders will create and modify laws and regulations that promote programs leading to scientific literacy for all.

Statewide Systemic Initiatives must be built on solid models of change, provide new directions for mathematics and science education, demonstrate broad involvement and commitment from all important partners, and make maximum use of state and local resources in the context of a sustained statewide initiative.

CURRENT STATUS OF THE PROGRAM

Twenty states and one commonwealth (Puerto Rico) were awarded cooperative agreements under this program during the first two funding cycles. States that have awards are: Connecticut, Delaware, Florida, Louisiana, Montana, Nebraska, North Carolina, Ohio, Rhode Island, South Dakota, California, Georgia, Kentucky, Maine, Massachusetts, Michigan, New Mexico, Texas, Vermont, and Virginia (Attached to this testimony are summaries of our current SSI awards). In FY 1993 thirty states submitted preliminary proposals and 28 states submitted full proposals for the third

round of funding. Eleven were selected for site visits, and five are being recommended for funding for FY 1993. We do not expect to make new awards under this program during FY 1994.

Progress in each state is regularly monitored and an annual review of progress is conducted. During the third year of operation, each state will participate in a comprehensive review of progress to date.

THE REVIEW PROCESS

The review process begins with required preliminary proposals that are received three months prior to the deadline for full proposals and are reviewed by NSF staff members. Principal investigators are then sent extensive advisory comments.

The SSI Program uses a two-stage review process for full proposals: panel reviews and site visits.

Full proposals are first reviewed independently by scientists, mathematicians, science educators, mathematics educators, policy analysts, and assessment experts. After panel discussion, each panel rates the proposals as: (1) highly competitive and worthy of a site visit; (2) competitive and worthy of a site visit if funds permit; and (3) definitely not worthy of a site visit.

Site visits are critical for identifying states with programs that are likely to succeed. SSI programs are complicated and complex, involving multiple institutions and partners. There is a need for strong ties to policymakers, business leaders, and the community, as well as to educators. It is not possible, within the limitations of a proposal, to fully describe all aspects of a project. Site visits provide opportunities for verification and clarification regarding the quality of relationships among the partners, and the degree to which commitments and points of view are shared.

Three weeks before the site visit, the PI receives a set of questions requesting clarification on the issues raised in the initial panel review. Responses to these questions are made available to the site visit team upon arrival. Following the site visit, the PI has an additional two weeks to respond in writing to questions generated by the site visit.

Site visit teams consist of four external reviewers, an SSI program officer and, occasionally, another NSF staff member. Each on-site visit lasts two days and consists of intensive meetings with the PIs and key policymakers such as governors, legislative education chairs, state board of education members, and chief state school officers. Small group sessions are held with teachers, administrators, scientists and mathematicians, parents, representatives from business and industry,

representatives from higher education, and state education agency staff members. These sessions are highly interactive, and give site visit team members a chance to probe issues not explicitly addressed by the review panels.

Team members develop a report that includes a recommendation for funding based on their assessment of the individual reviews, panel reviews and findings from the site visit.

REVIEW CRITERIA

Team members use the following criteria as guidelines for evaluating the quality of state SSI projects:

1. **State commitment.** Do states exhibit a commitment to fundamental reform of mathematics and science education? Are the changes they propose pervasive? Do they identify local resources which will be used to support NSF funds and focus discretionary resources on their mathematics and science education reform (e.g., Eisenhower, Chapter 1, Chapter 2, Vocational Education, and funds from other sources)?
2. **The state's vision for mathematics and science education.** Does the vision include appropriate new directions and approaches with regard to curriculum goals, changes in school structure and decision-making, equity, teacher preservice and inservice, assessment and accountability, and articulation within the system? Is the vision understood and shared by project partners?
3. **Consensus on the current status of science and mathematics education and on identification of the most serious problems that need to be addressed.** Are the problems identified as the key concerns to be addressed in the proposal shared by project partners?
4. **Partnerships that enable the effort to succeed.** Are educators at all levels, scientists, mathematicians, the business community, parents, and science and technology centers all involved? Are key policymakers (governors, legislators, state and local boards and departments of education, and boards for higher education) working collaboratively with the project? Are strategies proposed that will result in significant and sustained changes in schools?
5. **Implementation plan to provide management and oversight of the project.** Does the state have the capacity to effectively organize, implement, and monitor this project? Are proposed key staff able to assure successful accomplishment of the project?

6. **Evaluation plan.** Will data be used for mid-course corrections, as well as outcomes? Is evaluation integrated into the management plan?

Following receipt of site visit reports and follow-up responses, SSI staff analyzes all materials and makes recommendations to the Assistant Director for Education and Human Resources (EHR), who then forwards them to the National Science Board for action.

PROGRAM MANAGEMENT AND OVERSIGHT

As part of this program, NSF provides advice to all states through meetings with program officers and feedback during the review process. In addition, representatives from funded states have opportunities to attend PI meetings and special conferences.

Principal Investigators or Project Directors (PIs/PDs) attend two meetings a year convened by the NSF to address issues concerning both the national SSI Program and their individual states. These meetings have created a national network, provided opportunities for PIs and PDs to focus on common issues, and helped them identify available resources.

NSF began a technical assistance program in April 1992 to assist SSI states on-site with issues such as strategic planning, curriculum development, equity, staff development, assessment, project evaluation, and public awareness campaigns. This effort resulted in an electronic network to facilitate communication among all states; biannual PI meetings; and forums for discussion of important issues such as managing systemic reform.

NSF believes that technical assistance is a critical component of this program. For example, budget cuts in recent years have left states and districts without an "infrastructure" that builds capacity for and can support reform. Intensive leadership experiences for state, district, and school staff about content issues, pedagogy, and reform strategies are needed.

In addition, ongoing monitoring of SSI initiatives is provided by the EHR Division of Research, Evaluation, and Dissemination. Regular written reports are submitted to NSF and distributed to the evaluation and technical assistance contractors, and the PI.

States conduct their own evaluations and the changes in implementation plans resulting from that study are negotiated during annual program reviews. This permits a thorough assessment of a state's progress and facilitates appropriate shifts in project direction.

PROGRAM EVALUATION

NSF also has in place a process for a multi-year evaluation of the SSI Program. The evaluation will determine the effectiveness of strategies for change, the extent to which significant policy changes occur, the achievement of students, and the improvement of teachers and schools. Five interrelated data collection activities will be used in the analysis: case studies of 9 states; documentation via telephone and periodic visits to all states; statistical indicator data from various third-party sources; pilot teacher surveys; and data obtained from state evaluators and NSF monitors.

LESSONS LEARNED

- Use of a competitive review process has been essential. The process is developmental and permits states to take advantage of new learning at each stage. In addition, holding multiple competitions over three years, has resulted in improvements in the quality of proposals.
- NSF is not directive regarding who should respond to the RFP, and the governor's office in each state was able to determine who should reply. This results in broad-based coalitions led by interested and knowledgeable partners. State Departments of Education, Boards of Higher Education, universities, and independent entities (e.g., the Montana Council for Teachers of Mathematics) have all provided leadership.
- It takes states longer to begin implementation of systemic reform (e.g., hiring staff, finding office space, contracting) than was originally anticipated by either the Foundation or the states. A phase-in of funds in the beginning of an initiative would be more effective.
- The flexibility of the program encourages states to focus initially on areas of greatest need, and respond to demographics, culture, and context. However, states are also developing strategies about how they will achieve statewide impact.
- The SSI program has stimulated partnership development in the states. One theme that we hear repeatedly is that the process of developing an SSI proposal is, in an of itself, a valuable activity for states. The implementation process results in serious partnerships between K-12 and higher education, schools and mathematicians and scientists, education and business and industry, among the SSI and other NSF initiatives

in the state, and between the SSI and other comprehensive state reform initiatives.

- o SSI initiatives have been remarkably successful in obtaining other funding. Key examples are the Department of Education's curriculum framework grants and other NSF funded initiatives such as the teacher collaboratives and teacher enhancement grants. The SSI has also been a catalyst that has focussed resources in states. SSI initiatives have focussed resources such as higher education and state Eisenhower funds, Chapter 2, and foundation grants. Some states are beginning to coordinate with Chapter 1 funds.
- o SSI has heightened awareness of mathematics and science education reform. In all SSI states there are serious discussions underway about the importance of mathematics and science education, and the need for state curriculum frameworks that reflect the national standards. States are developing recommendations about the kinds of curriculum materials that need to be in classrooms. In the New England states, the discussion has spilled over state boundaries and they are now participating in regional meetings around areas of common concern.
- o The SSI is focussing on teacher development. All SSI states are engaged in substantive teacher enhancement activities that incorporate programs that are tied to national and state standards, are of significant duration, and include follow-up support. States are providing leadership in developing new approaches in curriculum, instruction, and classroom assessment.
- o Many SSI states are identifying changes in teacher preparation and certification policies that reflect direction set by new state goals and frameworks.
- o SSI states are addressing how to rebuild the education infrastructure in education, science, and mathematics through programs aimed at creating new state leadership in mathematics and science education, identifying regional specialists who will work with schools, and training lead teachers.
- o Many states have a significant amount of reform activity underway. They have to identify strategies for how to integrate the SSI into other ongoing, large scale efforts.

CONCLUSION

The SSI Program offers states a unique opportunity to work cooperatively with the National Science Foundation on projects that are designed to fundamentally reform science and mathematics teaching and learning. Although there are significant differences among the states--in culture, wealth, and demographics--over the past three years, the SSI program staff has worked with all 50 states in some capacity, either by responding to preliminary proposals or reviewing formal proposals. A key feature of the program is a technical assistance model that anticipates problems and provides SSI states with access to expertise. SSI is truly a national program representing states with a wide variety of characteristics and approaches to reform.

As a comprehensive and systemic effort designed to enable fundamental reform of science and mathematics education, the SSI Program is understandably high-risk. Nevertheless, preliminary evidence supports the view that this comprehensive effort is engaging the appropriate participation of the key decision-makers and performers at the state level. It is also resulting in substantial leveraging of resources in excess of the 10 million dollars each state may receive from NSF. Moreover, the SSI projects as a group are providing a knowledge-base on systemic reform to the Nation.

Thank you for this opportunity to describe our systemic reform effort, targeted at improving mathematics and science education. I would be pleased to answer any questions you may have.

CALIFORNIA**Governor: Pete Wilson****Principal Investigator: Bill Honig**

State Superintendent of Schools
California Department of Education
721 Capitol Mall
Sacramento, CA 95814
(916) 657-2914

Five-Year Award: \$10,000,000

The California Advocacy for Mathematics and Science (CAMS) initiative will bring together top-level leadership from the State Superintendent of Public Instruction and the Governor's Office of Child Development and Education in support of improving mathematics and science education with an emphasis on full participation for underrepresented groups. The CAMS initiative addresses several barriers to the improvement of K-6 science and middle grades mathematics programs in the State.

The program has three objectives:

1. Galvanizing public support for improving mathematics and science education.
2. Developing and promoting elementary science instruction.
3. Replacing the usual curriculum and instructional features of middle grades mathematics instruction with materials and activities consistent with NCTM standards.

The CAMS initiative will make use of special meetings with policymakers, business and community leaders, and educators to heighten public awareness of the importance of science and mathematics education. Professional development and support will provide the basis for improved science instruction in the elementary grades and mathematics instruction in the middle grades.

DELAWARE**Governor: Michael Castle****Principal Investigator: Helen Foss**

Delaware Department of Public Instruction

P.O. Box 1402

Dover, DE 19903

(302) 739-6700

Five-Year Award: \$4,941,991

The overall mission of the project is to contribute to the national agenda to improve mathematics, science, and computer education by building on a commitment to systemic change made through participation in the national "Re:Learning" project and State reform efforts. This will be accomplished through a long-term statewide effort reaching all of the citizenry, particularly reaching out to traditionally underserved populations.

The specific goals of the project are to—

1. Promote rigorous science and mathematics content and pedagogy. Specific activities will (a) review and revise State curriculum goals in mathematics and science; (b) establish a Center for science and mathematics education at Delaware State University that will sponsor teacher training workshops and design efforts to improve minority participation in mathematics and science education; (c) establish selection criteria and identify schools that will participate in Project 21 (six Re:Learning schools and three non-Re:Learning schools in the first year); and (d) initiate a science and mathematics needs assessment at each participating school that identifies goals, learning outcomes, and staff development activities.
2. Promote continued culture change in schools and the community. Specific activities will (a) identify major community segments that are part of participating schools' communities and develop strategies to persuade the various segments to become involved in the reform effort; (b) initiate a science and mathematics seminar series for teachers and the public; (c) prepare a science and mathematics newsletter for parents; and (d) conduct extracurricular science and mathematics activities in Project 21 schools.
3. Develop student performance assessment instruments. Specific activities will (a) inventory proven measures for student performance in mathematics and science; (b) collect baseline data on student knowledge and community values about science and mathematics education; (c) initiate a qualitative study of school progress in science and mathematics education reform; and (d) develop classroom performance measures aligned with curriculum development activities.

**CONNECTICUT**

Governor: Lowell Weicker

Principal Investigator: Judy Carson

Education Consultant

State Department of Education

P.O. Box 2219

Hartford, CT 06145

(203) 566-2931

Five-Year Award: \$7,866,725

The overall mission of the project is to meet the National Educational Goal of mathematics and science achievement for all Connecticut K-12 students, with a particular focus on underserved and underrepresented youth, through a long-term statewide effort reaching all of the citizenry.

The specific goals of the project are to—

1. Establish by legislative action The Connecticut Academy for Education in Mathematics, Science, and Technology, which will serve as the vehicle for long-term systemic change through advocating reform, setting of educational standards, and providing technical assistance to school districts.
2. Reform K-12 mathematics and science learning through district-level curricular reform and enhancement, and assessment of student access and performance.
3. Create higher education partnerships for K-12 education through dialogues between Institutes of Higher Education (IHE) and other groups, collaboration of IHE's with local schools and other organizations, and restructuring of teacher preparation curricula.
4. Create a climate for change through minority access, parent involvement, and school/business collaborations.
5. Implement a campaign for public understanding through cooperative activities between The Connecticut Academy, the Connecticut Business Roundtable, the Connecticut Public Television, and various other corporate and media partners.



FLORIDA

Governor: Lawton Chiles

Principal Investigator: Jack Leppert

Florida Department of Education
325 West Gaines Street, Suite 344
Tallahassee, FL 32399-0400
(904) 922-4207

Five-Year Award: \$7,913,882

The goals of the project are grouped under three initiatives:

Initiative 1. Restructuring K-8 Science Education using "Florida's fragile environment" as a theme.

- ❑ Develop *Florida's Fragile Environment Source Books*, which provide suggestions for instructional materials, alternative assessment strategies, available resources, networks, databases, and state-of-the art technology.
- ❑ Expand partnerships and use Florida's science-rich institutions and natural and human resources as part of curriculum guide implementation.
- ❑ Have every elementary and middle school conduct a significant project to study and improve Florida's environment.

Initiative 2. Restructure the education of science teachers.

- ❑ Develop new approaches to teaching science at the postsecondary level.
- ❑ Restructure elementary and middle school teacher preparation programs.
- ❑ Revise teacher certification and recertification requirements to include Florida's new environmental theme courses.

Initiative 3. Develop teacher and community support for systemic change.

- ❑ Provide teachers with resources, training, and support through a comprehensive leadership model.
- ❑ Establish a statewide interactive communications network to guide and support restructuring K-8 science education.
- ❑ Build broad-based community understanding and support for restructuring efforts to assure continuation of this systemic initiative project.

GEORGIA

Governor: Zell Miller

Principal Investigator: Michael Padilla

University of Georgia
Bowd Graduate Studies Research Center
University of Georgia
Athens, GA 30602
(706) 542-1763

Five-Year Award: \$10,000,000

The Georgia Initiative in Mathematics and Science (Project GIMS) focuses on teacher education, adopts improved curricular materials and instructional techniques, and uses appropriate assessment techniques. Five university-based regional centers, geographically located throughout the State, will link schools with university faculty, current instructional material, new pedagogies, and other resources to support Georgia's vision of science and mathematics education. In addition, policy revisions, public awareness, and parent support will be developed to support the following goals:

1. To increase the successful participation of underrepresented groups in mathematics and science.
2. To develop teachers with strong content and pedagogical foundations in mathematics and science.
3. To recruit and retain the highest quality teaching force.
4. To develop and implement curriculum based on a set of comprehensive principles that is application-based, interdisciplinary in nature, and requires active learning participation.
5. To design innovative assessment techniques that reflect curriculum goals and instructional strategies appropriate to mathematics and science.
6. To initiate fundamental changes in the State educational structure that will empower students, teachers, parents, administrators, and the community to achieve greater scientific literacy.

**KENTUCKY**

Governor: Wallace Wilkinson

Project Director: Michael Howard

Kentucky Science and Technology Council

P.O. Box 1049

Lexington, KY 40588-1049

(609) 233-3502

Five-Year Award: \$9,672,300

The joint venture between the Department of Education and the Kentucky Science and Technology Council, Inc.—Partnership for Reform Initiatives in Science and Mathematics (PRISM)—builds upon the Kentucky Education Reform Act (KERA) to address specific needs and barriers that hinder the restructuring of science and mathematics education in the State.

The project has three goals:

1. To enable Kentucky students to acquire the conceptual knowledge, process skills, thinking skills, and habits of mind that characterize scientific literacy.
2. To encourage more Kentucky students, especially those from underrepresented groups, to follow programs leading to science, mathematics, and technology-related careers, including teaching.
3. To make the general public and opinion leaders in Kentucky aware of the value of knowledge and skills in mathematics, science, and technology as important outcomes of education.

To achieve these goals, PRISM will coordinate mathematics and science initiatives in developing teacher-specialists to support change in classroom practices, altering teacher preservice programs, developing and implementing a plan to foster participation by underrepresented groups, and establishing policy to enhance awareness and value of mathematics and science education.

LOUISIANA

Governor: Edwin Edwards

Principal Investigator: Kerry Davidson

Deputy Commissioner

Academic Affairs and Research

Louisiana Board of Regents

150 Riverside Mall, Suite 129

Baton Rouge, LA 70801-1389

(504) 342-4253

Five-Year Award: \$10,000,000

Louisiana's SSI program is administered by the Louisiana Systemic Initiative Program Council (LaSIP), an interagency council created by the Governor.

LaSIP is implementing six initiatives:

1. **Preservice**—A statewide review of preservice mathematics and science programs is being conducted and making recommendations for change to the Board of Regents.
2. **Inservice**—Twenty projects have been selected for implementation. These projects are being conducted by colleges and universities (systemic sites) in cooperation with local education agencies.
3. **Teacher Certification**—Recommended modification of certification for elementary and middle grades are being developed and submitted to the Board of Elementary and Secondary Education for action.
4. **Curriculum and Materials**—Mathematics and science curriculum frameworks (K-12) are being developed.
5. **Educational Technology**—Current uses will be expanded, and new uses will be evaluated and employed.
6. **Professional Partners**—Practitioners are making students aware of the role of mathematics and science in careers. They are involved in inservice, preservice, and systemic site activities.

**MAINE****Governor: John McKernan****Principal Investigator: Jacqueline Mitchell**

Maine Department of Education

Augusta, ME 04333

(207) 287-5925

Five-Year Award: \$10,000,000

"Maine: A Community of Discovery" will fundamentally change the opportunities, performances, and aspirations in mathematics and science for all of Maine's students, preschool through college. Educational, political, business, and community leaders joined in the initiative to coordinate changes in—

1. Curriculum.
2. Teacher preparation programs.
3. Teacher enhancement programs.
4. Alignment of curricular goals with assessment.

The vehicles for change will include Beacon Schools—schools selected to be laboratories for testing new curriculum materials and teaching methods and that will later serve as models and dissemination centers for all schools in Maine. Fourteen mathematics and science facilitators will be responsible for dissemination of the instructional materials, methods, and technology developed at the Beacon Schools. At the postsecondary level, Maine will establish a Beacon College, a consortium of institutions of higher education that will reform their teacher preparation programs consistent with the Beacon Schools' needs. In addition, the State will mount community awareness programs, progressive institutes and workshops for teachers, and efforts to increase the use of technology. Mathematicians and scientists will participate throughout the project's components.

MASSACHUSETTS

Governor: William Weld

Principal Investigator: Susan Tave Zelman

Massachusetts Department of Education

1385 Hancock Street

Quincy, MA 02169

(617) 770-7505

Five-Year Award: \$10,000,000

Partnerships Advancing Learning of Mathematics and Science (Project PALMS) seeks to improve science and mathematics educational opportunity and outcomes through policy, curricular, leadership, and partnership initiatives. Program components include the following:

1. Producing the first-ever State curriculum framework for Massachusetts.
2. Hiring science and mathematics specialists by the Department of Education.
3. Implementing a new science and mathematics Master Teacher certification standard.
4. Using the State curriculum framework to develop curriculum alterations that will be activity-based, with great potential for incorporating educational telecommunications networks and other technologies into the classroom.
5. Developing linkages between schools and colleges to align preservice and inservice curriculum with the State's framework.

To support school-based change, leadership academies for teachers and administrators will focus on structural and organizational alterations that will foster continued educational reform at the school site. Partnerships with the media, informal education centers, business and industry, and community groups will coordinate a public awareness campaign on the importance of mathematics and science literacy.



MICHIGAN

Governor: John Engler

Principal Investigator: Sharif Shakarani

Michigan Department of Education

P.O. Box 30008

Lansing, MI 48909

(517) 373-7248

Five-Year Award: \$9,990,970

The Michigan Statewide Systemic Initiative in Mathematics and Science (MSSI) will implement a comprehensive transformation of science and mathematics education by coordinating policy initiatives already in place with curricular, leadership, and partnership initiatives to support school-based change in science and mathematics education.

Michigan plans five connected interventions:

1. Develop a *State vision* statement for mathematics and science education, circulate it widely, revise it, and obtain endorsements from the MSSI Steering Committee, the State Board of Education, and a range of stakeholder groups.
2. Design and carry out a systematic review of existing legislation and State policies, programs, and regulations that strengthen or impede the vision. The review will be widely shared with key policymakers, and recommendations will be reviewed annually to determine the extent of implementation.
3. Create *Models of Effective Learning* in 25-50 targeted school districts. This initiative will focus on economically disadvantaged urban and extreme rural districts, along with other districts interested in reform in mathematics and science education. The Models will generate new knowledge about creating successful community coalitions to reform mathematics and science education.
4. Reform *teacher education* programs to bring them into line with the State's vision for mathematics and science education.
5. Develop and coordinate *State-level staff development* to support mathematics and science education reform consistent with the vision statement.
6. Create an *evaluation plan* that will determine the success of the project's proposed outcomes as well as the success of other State-level activities to reform mathematics and science education.

MONTANA

Governor: Marc Racicot

Principal Investigator: Johnny Lott

Department of Mathematical Science

University of Montana

Missoula, MT 59812

(406) 243-2696

Five-Year Award: \$9,942,175

The goals of the project are to—

1. Redesign the grades 9-12 mathematics curriculum using an integrated interdisciplinary approach for all students.
2. Develop and publish curriculum and assessment materials for grades 9-16.
3. Incorporate the use of technology in all facets and at all levels of mathematics education.
4. Increase the participation of females and Native Americans in mathematics and science and increase the number of females and Native American teachers in these areas.
5. Establish new certification and recertification standards for teachers.
6. Using an integrated interdisciplinary approach, prepare new teachers to incorporate the new curriculum and materials into their teaching.
7. Prepare inservice teachers in grades 9-16 to implement integrated mathematics programs.
8. Advise, inform, and influence the legislature, the general public, and other public and private sectors of the State to support implementation of the new programs.

**NEBRASKA**

Governor: Ben Nelson

Program Director: Karen Ward, Professor

Nebraska Math and Science Coalition

P.O. Box 880326

Lincoln, NE 68588-0326

(402) 472-8965

Five-Year Award: \$4,681,914

The goals of the project are to—

1. Initiate a distance learning project that will employ educational television, videodisc technology, and electronics networks in support of mathematics education with a particular emphasis on providing support for rural Nebraska schools.
2. Initiate a teacher training project, beginning with elementary teachers and progressing to secondary teachers, that supports implementation of the NCTM standards, and will specifically increase the number of mathematics requirements for elementary certification.
3. Ensure that all initiatives under this project are concerned with making mathematics and science education culturally relevant for all students.
4. Develop a public awareness campaign that generates public support for reform in mathematics and science education.
5. Develop a science initiative that complements the efforts in mathematics education.
6. Develop the Nebraska Mathematics Coalition to assure support after NSF funding ends.

NEW MEXICO**Governor: Bruce King****Principal Investigator: David Colton**

University of New Mexico

Albuquerque, NM 87131

(505) 277-1999

Five-Year Award: \$9,944,000

New Mexico will foster systemic change that will improve mathematics and science education in New Mexico's K-8 public schools. The systemic change will be based on the Re:Learning model of school-based reform and will incorporate new content, pedagogy, and assessment in mathematics and science.

The project will—

1. Establish a State-level council of stakeholders to provide guidance and oversight for systemic change activities.
2. Establish regional technical assistance centers whose staffs will work directly with K-8 schools in implementing systemic change.
3. Initiate staff development programs in approximately 90 elementary and middle schools in each year of the program, with each school participating in a 2-year program of summer and academic year staff development activities guided by the Re:Learning model of school-based change.
4. Assist in the development and dissemination of State standards, assessment systems, teacher licensure requirements, and staff development policies that are aligned with the standards being prepared by the NCTM, NSTA, and AAAS.
5. Support postsecondary curriculum reforms and community organizations' initiatives that are consistent with (4) above.
7. Create the conditions needed to reduce the performance gaps typically associated with gender and ethnicity in math and science.
8. Evaluate annual progress in meeting these goals.



NORTH CAROLINA

Governor: James Hunt

Principal Investigator: Denis DuBay, Director

North Carolina Science and Mathematics Alliance

410 Oberlin Road, Suite 306

Raleigh, NC 27605

(919) 733-9161

Five-Year Award: \$7,856,586

The goals of the project are to establish 10 regional partnerships to catalyze local resources to:

1. Provide the training, resources, support, and incentives for teachers and schools to transform science and mathematics instruction into a participatory, hands-on exploration of the everyday workings of technology and the natural world.
2. Develop school and community-based initiatives that increase opportunities for women and minorities in science, mathematics, and technology.
3. Involve students, parents, practicing scientists and engineers, and community and educational leaders in improving science and mathematics education through local and statewide efforts.

The 10 regional partnerships include scientists, engineers, health and other technical professions with educators, parents, and students. Their activities include Scientist-Teacher exchanges that involve scientists and teachers working together to plan and implement classroom support activities and summer industry and university internships. In addition, support teams of university educators, future teachers, parents, and industry professionals compile and distribute resource materials for classroom and school use. Tech-Prep programs support curricula that offer high school students the opportunity to connect their high school mathematics and science courses to degree programs in technical colleges.

OHIO

Governor: George Voinovich

Principal Investigator: Jane Butler Kahle

Condit Professor of Science Education

Miami University

Oxford, OH 45056

(513) 529-1686

Five-Year Award: \$9,645,000

The Ohio Mathematics and Science Discovery Project is a statewide effort to improve educational outcomes in mathematics and science by building consensus for educational goals, improving preservice education, and creating professional development opportunities for middle school and junior high school mathematics and science teachers.

The goals of the project are to—

1. Establish 10 regional centers staffed by teams that include mathematician and scientist/educators and teacher-leaders and that emphasize problem solving and inquiry-based instruction.
2. Use research strategies that assess changes in student learning.
3. Perform additional research to focus on the adaption or creation of new inquiry-based instructional materials.
4. Provide ongoing support to practicing teachers and develop a leadership core that can introduce new approaches to the learning of mathematics and science. The new approaches will include increased use of technology and the implementation of evaluation and assessment strategies that complement inquiry-based instruction.



PUERTO RICO

Governor: Pedro Rosello

Principal Investigator: Manuel Gomez

University of Puerto Rico

P.O. Box 364984

University Station

San Juan, PR 00936-4984

(809) 764-8369

Five-Year Award: \$10,000,000

The Puerto Rico Statewide Systemic Initiative in Science and Mathematics Education is a joint venture between the Puerto Rico Department of Education, the Resource Center for Science and Engineering, and the Puerto Rico General Council of Education to revise its science and mathematics curriculum in grades K-12. This collaboration provides a method to link expertise in science and mathematics education, institutions of higher education, and policy initiatives to systemically alter Puerto Rico's educational system.

The project will—

1. Revise the science and mathematics curriculum, with a focus on students' cognitive skills and depth of scientific understanding.
2. Revise the teacher preparation curriculum to upgrade subject matter understanding and instructional methods.
3. Promote parent and community involvement in school improvement efforts.
4. Develop, pilot, and adopt new assessment methods consistent with revised curriculum materials and instructional practices.
5. Establish and measure islandwide standards of excellence in science and mathematics education.

Twenty-one model schools (one elementary, middle, and secondary school in each of the Commonwealth's seven geographic regions) will be the vehicles for testing and disseminating the reforms. They will serve as regional centers for 10 additional schools. By the year 2000, all 1,600 schools in Puerto Rico will have restructured their science and mathematics education programs.

RHODE ISLAND

Governor: Bruce Sundlun

Principal Investigator: Kenneth DiPietro

Rhode Island Department of Elementary and

Secondary Education

22 Haves Street, Room 201

Providence, RI 02908

(401) 277-2821

Five-Year Award: \$9,351,040

Rhode Island's project is focused on changes in science and mathematics education reform for K-8, incorporating the reforms into the statewide master plan for science and mathematics education K-16. The goals of the Rhode Island Statewide Systemic Initiative Program are to—

1. Establish a leadership team at the Department of Elementary and Secondary Education.
2. Work with the special legislative commission to develop a master plan for mathematics and science education K-16.
3. Establish resource specialists in five sites throughout the State and develop teacher training centers to enhance science and mathematics education.
4. Develop statewide K-8 science and mathematics frameworks.
5. Disseminate statewide frameworks and provide districts an opportunity to review their existing curricula to determine how to incorporate the frameworks.
6. Establish leadership teams at the school level to review and implement frameworks.
7. Work with private sector through Rhode Island Mathematics and Science Education Collaborative, which will establish a clearinghouse for all schools.
8. Identify a task force on underrepresented populations that will identify national programs that work with these populations.
9. Develop performance-based assessment strategies for mathematics and science.
10. Create a liaison with higher education to work with college and university teacher preparation.



VERMONT

Governor: Howard Dean

Principal Investigator: Bruce Richardson

Vermont Department of Education
120 State Street
Montpelier, VT 05620
(802) 828-3121

Five-Year Award: \$9,695,922

The Vermont Statewide Systemic Initiative in Science, Math and Technology is a collaborative project between five sectors—education, business, higher education, government, and the community at large—to increase the mathematics, science, and technology performance of all students. To carry out this project, the Vermont State Board of Education and the Agency for Development and Community Affairs will jointly establish the Vermont Institute for Mathematics, Science and Technology.

A two-pronged approach will couple school-based change efforts with State policy initiatives. Major components include the following:

1. Creating a statewide Science/Mathematics/Technology (S/M/T) working curriculum framework to guide local curriculum development, professional development, and assessment.
2. Providing intensive professional development programs for teachers through summer institutes, year-round support, and a variety of other professional development strategies.
3. Redesigning college science, mathematics and technology courses to strengthen practical training for new teachers, and developing alternative pathways for second career S/M/T teachers.
4. Developing a statewide, integrated strategy for Science/Mathematics/Technology performance assessments that build on Vermont's existing assessment of student work through mathematics and writing portfolios.
5. Creating a statewide S/M/T telecomputing network that links schools with representatives from business and higher education.

VIRGINIA

Governor: L. Douglas Wilder
Principal Investigator: Joseph Exline
Virginia Department of Education
101 N. 14th Street
James Monroe Building
Richmond, VA 23219
(804) 225-2376

Five-Year Award: \$9,615,914

The Virginia Quality Education in Science and Technology (V-QUEST) will extend two prior State efforts already under way—the Department of Education's "World Class Education," an ambitious 10-year plan to define learning outcomes for all students; and "Workforce 2000," a blue-ribbon panel report to the Governor that calls for a scientific and technologically literate citizenry.

The project will focus on improving mathematics and science education in grades K-8. Virginia conducted an extensive needs assessment, and from this developed the seven following components of V-QUEST:

1. Creating a school-based mathematics and science lead teachers initiative.
2. Developing new preservice and inservice models for teachers.
3. Tying selection criteria for instructional materials and assessment reform to the effort.
4. Developing a leadership component for school and district administrators.
5. Conducting a community action campaign.
6. Supporting mathematics and science education through the State's telecommunications system (V-PEN).
7. Improving student assessment.

The PI will work with 7 component coordinators, a State Action Council, and 10 Local Action Councils to create a management structure that links content (through the components) with a process (State and Local Action Councils) for local involvement.

Chairman KILDEE. Thank you very much, Dr. Earle.

Dr. Morra?

Dr. MORRA. Thank you. Mr. Chairman, Representative Goodling, and members of the subcommittee, I am pleased to be here today to discuss our report on systemwide education reform.

My testimony today will focus on four districts that have had many years of experience with systemwide reform. They differ in size, spending level, poverty level, and approach, yet their experiences offer insight into the potential Federal role in systemwide reform. In these districts, systemwide reform has been a long-term, ongoing process that requires substantial commitment and effort.

Systemwide reform includes five key, interrelated system components: one, goals or standards expected of all students; two, curricula linked directly to those standards; three, high-quality instructional materials appropriate to the curricula; four, professional development to enable teachers and other educators to understand the curricula and the most effective instructional approaches; and five, student assessment systems that are based directly on the curricula.

The standards are the driving force in these reforms. They define what students should know and be able to do, and they apply to all students. A growing consensus exists that high standards, incorporating higher-order skills related to complex reasoning and problem solving, should be set. Efforts are underway on a variety of fronts to develop high standards.

The districts we visited had developed standards for all students at each grade level. These standards included a vision of the types of knowledge, skills, and abilities students need when they graduate. This provided a focus for decisions about all other elements of the system: curriculum and instruction, professional development, and assessment.

Three of the districts began reform in the 1970s or early 1980s and established standards related primarily to basic skills and raising achievement test scores. Each district had been working for several years, however, to incorporate high standards into its system in key subject areas, such as math and reading. The standards issues in 1989 by the National Council of Teachers of Mathematics were being used extensively in three of the districts.

Student assessments related to the district's curricula were a key part of the instructional reform. Student progress in achieving the standards was monitored frequently.

In one district, for example, students were assessed four to six times a year on tests designed to monitor progress toward the district's standards. Results were provided quickly so that teachers could follow up with individual students, as necessary. This focus on student achievement also led to a change in the role of principals, who focused more on helping teachers teach and students learn and less on their more traditional role of administrators.

The experiences in these districts provided several key insights into the process of systemwide reform. First, systemwide reform was a long-term process, requiring vision and commitment. In each case, as reform unfolded, all system components, including standards and assessments, were changed, sometimes annually, as the districts acquired more experience and monitored their success.

In these districts, the superintendent was a key force for the reform. Each provided the vision and leadership to develop and maintain consensus in support of reform. A key factor in their success was their longevity in the district.

Second, technical assistance was important. Technical assistance was ongoing as the reforms evolved, and districts saw it as essential. The districts hired private or university consultants to help, in areas such as conducting needs assessments, setting standards, writing curricula, and developing assessment tools. In one case, the district used State-developed curriculum frameworks as a starting point for developing its own standards and assessments.

Third, teacher support was critical. The districts obtained teacher support by training the teachers about the need for and the process of reform, involving them in writing the new standards, curricula, and assessments and providing training in various instructional approaches.

The four districts used a variety of methods to provide professional development, such as staff retreats, summer workshops, and training during school hours for which substitute teachers were provided.

Two districts established teacher centers. For example, one established three teacher centers that provided intensive training over a period of 5 to 8 weeks in instructional practices and other aspects of reform. The difficulty in maintaining professional development efforts was also demonstrated. For example, one district recently had to close its teacher centers because of budget constraints.

Fourth, assessing overall progress toward high standards may be difficult. Districts are likely to have more difficulty in measuring overall success as they incorporate new, higher standards. Districts track the progress of reform efforts through the use of norm referenced standardized achievement tests. Such tests, though not directly linked to the district's curricula and standards, are a recognized measure of student achievement in basic skills.

To measure student progress toward new, higher standards, districts will need a broader range of assessment instruments, such as portfolios and demonstrations. The districts we visited were developing and training teachers to use these relatively new types of assessment, but aggregating results of these tests to measure progress is more difficult than using norm referenced tests.

Fifth, current Federal programs may not support systemwide reform. Existing Federal categorical programs, such as Chapter 1, played little part in these districts' reforms. District officials said that Federal categorical programs targeted to specific groups of at-risk students, such as the disadvantaged or those with disabilities, were not supportive of reforms directed to improving achievement of all students. On the other hand, Federal programs did not seem to significantly hinder reform activities.

The districts' use of federally-funded technical assistance was mixed. The two larger districts had obtained some assistance from federally-assisted centers. The two smaller districts, on the other hand, did not seek such help. One superintendent pointed out that his district needed onsite consultation and support and that the nearest Federal lab was too far away to make that practical.

We did not assess the extent to which federally-funded research and technical assistance efforts currently support systemwide reform or the extent to which they could do so. However, we noted some potential limitations. For example, many of the Federal technical assistance centers target specific programs, such as Chapter 1 or bilingual education programs.

Mr. Chairman, systemwide reform holds promise for improving student learning, but in the absence of State and Federal actions, maintaining commitment and finding resources for systemwide reform may be difficult for many districts. Systemwide reform is slow, it is evolutionary, and it is continuous. It demands a great deal of time, commitment, and flexibility from its participants.

Continuing reform over the years may be difficult for many districts. Frequent changes in leadership make commitment harder to maintain. Yet, we know that nationally, superintendent turnover is quite high, especially in large urban districts where the average tenure is only 2 years. Also, many districts are facing significant financial difficulties. Finding funding and energy for reform, while trying to adjust to reductions in State and local funding, may make undertaking systemwide reform a more difficult task in the mid 1990s.

The Congress could take a variety of actions if it wishes to encourage district level systemwide reform. For example, Congress could support efforts to develop voluntary high national and State content standards and support the development of exemplary assessment methods appropriate to those standards.

The Congress could ensure the availability of technical assistance and professional development to districts implementing or seeking to implement systemwide reform.

The Congress could make existing Federal categorical programs more conducive to systemwide reform by, for example, giving priority for grants to applicants serving targeted groups in the context of systemwide reform. However, in making these types of changes, provision should be made to ensure the needs of at-risk students are met.

Congress could also direct the Secretary of Education to take steps to disseminate information about successful reform efforts and to review the scope and functions of the Federal research centers, labs, and technical assistance centers to determine the extent to which they could assist in systemwide reform efforts.

Mr. Chairman, this concludes my testimony. I would be glad to answer any questions that you or other members might have.

[The prepared statement of Linda G. Morra follows:]

SUMMARY OF TESTIMONY BY LINDA G. MORRA
SYSTEMWIDE EDUCATION REFORM
FEDERAL LEADERSHIP COULD FACILITATE
DISTRICT-LEVEL EFFORTS

Even after a decade of reform, our schools still need help. Many educators and policymakers now believe that to significantly improve student learning the education system as a whole must be changed. Systemwide reform includes five key components: (1) goals or standards for all students, (2) curricula tied to those goals, (3) high-quality instructional materials, (4) professional development, and (5) student assessments tied to the curricula. Attention is also being focused on setting high standards, including such skills as complex reasoning and problem solving. Efforts are underway at the national and state levels to develop voluntary standards and related assessment systems. Systemwide reform can be a long-term process requiring substantial commitment and effort. We believe that Congress could facilitate district efforts to undertake such reforms.

DISTRICTS WE VISITED HAD UNDERTAKEN SYSTEMWIDE REFORM. The four districts had developed standards for all students at each grade level that included a vision of what students needed to know when they graduated. These standards provided a focus for decisions about all other elements of the system. Student assessments related to the district curricula were a key part of the instructional reform. When evidence showed progress was not sufficient, districts made changes to improve learning.

COMMON THEMES IN REFORM IMPLEMENTATION. The experiences in these districts provided several key insights into the process of systemwide reform. First, systemwide reform was a long-term process, requiring vision and commitment. Second, technical assistance was important in developing and carrying out the reforms. Third, teacher support was critical. Fourth, assessing overall progress toward high standards may be difficult. Finally, current federal programs may not support systemwide reform.

IMPLICATIONS FOR FEDERAL ROLE IN FOSTERING SYSTEMWIDE REFORM. Having key components of the education system linked together promotes monitoring of student achievement to ensure that progress continues and enables all school personnel to work together to improve student performance. However, without state and federal actions, maintaining commitment and finding resources for systemwide reform may be difficult for many districts. Voluntary national standards could provide a starting place and direction for districts undertaking reform. But national standards and assessments alone are not likely to ensure widespread reform. Congress could take a variety of steps--in addition to supporting voluntary national standards--if it wishes to encourage districts to undertake systemwide reform. Among other things, Congress could help ensure that districts are aware of promising reforms, can provide sufficient professional development, and have the assistance they need to develop and implement reforms.

Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to discuss our report on systemwide education reform requested by the full committee and this subcommittee.¹ Even after a decade of reforms, our schools still need help. Twenty years of data from the National Assessment of Educational Progress show that our present education performance is low and not improving. For example, less than 10 percent of 17 year olds demonstrate the skills associated with the ability to function in more demanding jobs or to do college work, such as carrying out multiple-step problems, synthesizing information, and drawing conclusions. Also, gaps in achievement between minority and nonminority students are still wide.²

The 1980s saw a host of education reforms. But those reforms largely addressed individual parts of the system, such as merit pay for teachers, smaller class sizes, and an increased number of academic credits for graduation. Many educators and policymakers now believe that to improve student learning the education system as a whole must be changed. Attention is being focused on change designed to improve student outcomes by determining what students should know and be able to do, and ensuring that all the key components of the educational system are directed to achieving those outcomes.

My testimony today will focus on four districts that have had many years of experience with systemwide reform. They differ in size, spending level, poverty level, and approach, yet their experiences offer insight into the potential federal role in systemwide reform.

¹Systemwide Education Reform: Federal Leadership Could Facilitate District-Level Efforts (GAO/HRD-93-97, April 30, 1993).

²Ina V.S. Mullis, Eugene H. Owen, and Gary W. Phillips, America's Challenge: Accelerating Academic Achievement, Educational Testing Service (Sept. 1990).

In these districts, systemwide reform has been a long-term, ongoing process that requires substantial commitment and effort. We believe there are steps Congress can take if it wishes to encourage the nation's 15,000 school districts to undertake systemwide reform. Let me expand on these findings.

BACKGROUND

Systemwide reform includes five key, interrelated system components: (1) goals or standards expected of all students, (2) curricula linked directly to those standards, (3) high-quality instructional materials appropriate to the curricula, (4) professional development to enable teachers and other educators to understand the curricula and the most effective instructional approaches, and (5) student assessment systems that are based directly on the curricula.'

The standards are the driving force in these reforms. They define what students should know and be able to do, and they apply to all students. A growing consensus exists that high standards, incorporating "higher order" skills related to complex reasoning and problem solving, should be set. Efforts are under way on a variety of fronts to develop high national standards. The mathematics standards issued by the National Council of Teachers of Mathematics in 1989 have become a model for other efforts, such as those sponsored by the Department of Education and professional organizations such as the National Council of Teachers of English. Many states are also working to develop these types of standards.

¹These components of "systemwide" reform are often discussed in the literature in the context of "systemic" reform, which addresses an even broader view of the education system. See, for example, Marshall S. Smith and Jennifer O'Day, "Systemic School Reform," Politics of Education Association Yearbook 1990, p. 233-267.

These state and national standards, and related assessment systems, are meant to encourage reform and provide a direction for it. They will present broad frameworks of what students should know in specific subjects. Local educators would have considerable flexibility in using the standards, for example, in adding content to reflect local needs and in detailing curricula. Proposed legislation, among other things, includes provisions for developing national standards for what students should know and be able to do.

THE DISTRICTS WE VISITED
HAD UNDERTAKEN SYSTEMWIDE REFORM

The districts we visited had developed standards for all students at each grade level that included a vision of the types of knowledge, skills, and abilities students need when they graduate. This provided a focus for decisions about all other elements of the system: curriculum and instruction, professional development, and assessment. We saw in these districts a clear focus on learning and a willingness to make changes, either in individual teacher approaches or in district policies, to help students achieve.

Three of the districts began reform in the 1970s or early 1980s and established standards related primarily to basic skills and raising achievement test scores. Each district had been working for several years, however, to incorporate high standards into its system in key subject areas, such as mathematics and reading. The standards issued by the National Council of Teachers of Mathematics were being used extensively in three districts.

Student assessments related to the districts' curricula were a key part of the instructional reform. Student progress in achieving the standards was monitored frequently. In one district, for example, students were assessed four to six times a year on tests designed to monitor progress toward the district standards; these tests supplemented other information teachers used to make

judgments about each student's progress. The purpose of these tests was to focus attention on students who needed assistance. Results were provided quickly so that teachers could follow up with individual students as necessary. This focus on student achievement also led to a change in the role of the principals, who became "instructional leaders." They focused more on helping teachers teach and students learn and less on their more traditional role of administrator.

When test scores or other indicators showed progress was not sufficient, districts made changes in curricula and instruction. For example, after several years, one district recognized that students' scores in math and science were not rising to the extent anticipated. Officials revamped their curricula and assessments and put an emphasis on math and science districtwide.

COMMON THEMES IN REFORM IMPLEMENTATION

The experiences in these districts provided several key insights into the process of systemwide reform.

First, Systemwide Reform Was a Long-Term Process Requiring Vision and Commitment.

Reform in these districts was a long-term and continuing effort. Three of the districts had been in the process of reforming for over a decade; the fourth had begun in the mid-1980s. In each case, as reform unfolded, all system components, including standards and assessments, were changed as the districts acquired more experience and monitored their success. In these districts, the superintendent was a pivotal force for the reform. Each brought considerable expertise and experience to the district and provided the vision and leadership to develop and maintain consensus in support of reform. A key factor in their success was

their longevity in the district. Each began reform within a few years of coming to the district and stayed for many years.

Second, Technical Assistance Was Important.

Technical assistance was ongoing as the reforms evolved, and districts saw it as essential because of lack of time and experience among district staff. The districts hired private or university consultants to help in areas such as conducting needs assessments, setting standards, writing curricula, and developing assessment tools. Districts varied in the extent of outside assistance obtained. For example, two districts developed long-term relationships with consultants who were directly involved in many aspects of the reform. In contrast, another relied heavily on research by district personnel but also obtained assistance from a variety of sources, mostly on a short-term basis, to provide guidance on reform and training in a variety of instructional approaches. In one case, the district used state developed curriculum frameworks, which are nationally recognized, as a starting point for developing its own standards and assessments.

Third, Teacher Support Was Critical.

Administrators saw teacher support as critical to successfully implementing reform. The districts obtained teacher support by training the teachers about the need for and process of reform; involving them in writing the new standards, curricula, and assessments; and providing training in various instructional approaches. Yet, providing necessary staff development, training, and time to work on the standards may be one of the most difficult implementation issues for reform. The districts we visited devoted considerable energy to these purposes. The four districts also used a variety of methods to provide professional development, such as staff retreats, summer workshops, and training during school hours--for which substitutes were provided to free teachers for

training. Two districts established teacher centers. For example, one district established three teacher centers that provided intensive training, over a period of 5 to 8 weeks, in instructional practices and other aspects of reform. This is in marked contrast to the short-term in-service training teachers often receive.

The difficulty in maintaining professional development efforts was demonstrated in at least two districts where, as district funds became more constrained, funding for professional development was reduced. For example, one district recently had to close its teacher centers because of budget constraints, even though many teachers had not yet attended.

Fourth, Assessing Overall Progress Toward High Standards May Be Difficult.

Districts tracked the progress of reform efforts through the results of norm-referenced, standardized achievement tests. Such tests, though not directly linked to the districts' curricula and standards, are a recognized measure of student achievement in basic skills, and low scores on such tests were usually one reason reform was undertaken. Although we cannot make a causal link to the reform--because many factors affect students' test scores--students in these districts made substantial achievement gains as measured by these tests, and officials pointed to those gains as evidence of reform success.

Districts are likely to have more difficulty in measuring overall success as they incorporate new, higher standards. To measure student progress toward these new standards, districts will need a broader range of assessment instruments, such as portfolios and demonstrations. The districts we visited were developing--and training teachers to use--these relatively new types of assessments. But aggregating results of these tests to measure progress is more difficult than using norm-referenced tests.

Efforts are under way at the national and state levels to develop ways to use such assessment mechanisms beyond measuring individual student achievement, to compare achievement across, for example, districts or states.

Fifth, Current Federal Programs May Not Support Systemwide Reform.

Existing federal categorical programs, such as Chapter 1, played little part in these districts' reforms, although the districts received funding from a variety of such programs. District officials said that federal categorical programs--targeted to specific groups of at-risk students such as the disadvantaged and those with disabilities--were not supportive of reforms directed to improving achievement of all students. On the other hand, federal programs did not seem to significantly hinder reform activities.

We did not study in depth how those at-risk students who have been the traditional focus of federal programs fared under reform in the four districts we visited. However, teachers and administrators in two of the districts noted that teachers believed they were better equipped to deal with at-risk students in the regular classroom, and officials from one district pointed out that the proportion of students with disabilities that were mainstreamed had increased during the course of the reform. On the other hand, success is not guaranteed. For example, in another district, test scores of minorities improved but still lagged far behind those of nonminorities. The district was still looking for ways to improve achievement of minority students in relation to nonminorities.

The districts' use of federally funded technical assistance was mixed. Districts used systems such as the Educational Resources Information Center in researching reform issues, and the two larger districts had obtained some assistance from federally assisted centers. The two smaller districts, on the other hand, did not seek help from these types of centers and laboratories. One

superintendent pointed out that his district needed on-site consultation and support and that the nearest federal laboratory was too far away to make that practical. We did not assess the extent to which federally funded research and technical assistance efforts currently support systemwide reform, or the extent to which they could do so. However, we noted some potential limitations. For example, many of the federal technical assistance centers target specific programs, such as Chapter 1 or bilingual education programs. Also, there are only 10 regional laboratories, which have and could support reforms in a more general sense than centers associated with individual programs. There are also education research and development centers which assist school reform efforts; many focus on discrete parts of the education process, such as assessment or teacher evaluation.

IMPLICATIONS FOR FEDERAL ROLE IN
FOSTERING SYSTEMWIDE REFORM

Mr. Chairman, systemwide reform holds promise for improving student learning. Having key components of the education system linked together promotes monitoring of student achievement to ensure that progress continues and enables all school personnel to work together to improve student performance. Systemwide reform can accommodate a variety of instructional and administrative reforms and could provide a framework by which their success can be measured.

But, in the absence of state and federal actions, maintaining commitment and finding resources for systemwide reform may be difficult for many districts. Systemwide reform is slow, evolutionary, and continuous. It demands a great deal of time, commitment, and flexibility from its participants. Continuing reform over the years may be difficult for many districts. Frequent changes in leadership make commitment harder to maintain, and yet we know that nationally superintendent turnover is

relatively high, especially in large urban districts, where the average tenure is 2 years. Also, many districts in the nation, again including many large urban districts, are facing significant financial difficulties. Finding funding and energy for reform while trying to adjust to reductions in state and local funding may make undertaking systemwide reform a more difficult task in the 1990s.

Local involvement and acceptance of the standards that drive the reform are necessary. The districts we visited were using existing standards, both the national mathematics standards and state standards, as guides but were adapting them to local curricula. The emphasis on teacher involvement also reinforces the need for local input.

In conclusion, if voluntary national standards, and related assessments, are developed, they could provide direction and serve as a starting point for district reform. But national standards and assessments alone are not likely to be sufficient to ensure systemwide reforms are undertaken or that they are compatible with the national standards. The Congress could take a variety of actions if it wishes to encourage district-level systemwide reform. For example, Congress could

- support efforts to develop voluntary high national and state content standards and support development of exemplary assessment methods appropriate to those standards.
- ensure availability of technical assistance and professional development to districts implementing or seeking to implement systemwide reform.

- make existing federal categorical programs more conducive to systemwide reform by, for example, giving priority for grants to applicants serving targeted groups in the context of systemwide reform. In making these or other changes, such as those recommended by recent studies of Chapter 1, provision should be made to ensure the needs of at-risk students are met.

Congress could also direct the Secretary of Education to

- take steps to disseminate information about successful reform efforts, and
- review the scope and functions of the federal research centers, laboratories, and technical assistance centers to determine the extent to which they could assist in systemwide reform efforts.

In undertaking these or other actions the Congress should include federal and state governments as well as private agencies where appropriate. Further, recognizing that some districts and states are already undertaking systemwide reform in the absence of national standards, these actions should help ensure those efforts are directed toward the new, higher standards envisioned in current national standard-setting activities. Finally, although these actions are outlined in the context of encouraging district action, they are not meant to preclude federal support for state- or school-based reform.

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Mr. Chairman, this concludes my testimony. I will be happy to answer any questions that you or members of the Subcommittee might have.

Chairman KILDEE. Thank you very much, Dr. Morra.

I have a question for Dr. Meisels. Doctor, performance assessments ask teachers to look at assessment in a brand new light and must, therefore, it seems to me, require a great deal of staff training. How is this accomplished in the sites in Michigan where you are testing performance assessment?

Dr. MEISELS. We are currently working in Flint, as well as in several other districts, such as Willow Run. I am not sure if I said the right or the wrong thing.

Chairman KILDEE. You said the right thing.

Dr. MEISELS. It happens to be the case. In fact, performance assessment requires a rethinking of the way that teachers work with children, in terms of evaluating their work.

We have found that the amount of effort that is involved in this is not impossible because at this stage, when we go beyond Michigan, there are more than 6,000 children and 250 classrooms that are involved in working with us at the University of Michigan on performance assessment. It does entail a commitment on the part of school districts to do some retraining. We think the commitment is greater at the beginning and then, over time, decreases.

Chairman KILDEE. Have you operated in a preschool area, where very often you find the teachers are very young, often underpaid, and have less training? Have you worked with that type of professional group?

Dr. MEISELS. We are working with teachers of preschool and teachers of Head Start as well as State-funded preschool programs. Most of our Head Start work is in the State of Massachusetts, and we are also working here in the District of Columbia with the District of Columbia public schools and some of their prekindergarten programs. So there is a lot of diversity among the teachers. We, as well, have a contract with the Bureau of Indian Affairs to work with teachers in three sites, two in New Mexico and one in South Dakota. Again, we are talking about a lot of diversity.

We have found that the more expert teachers are, the more able they are to do this kind of observational assessment. But with training and support, we can bring them along so that everyone can participate in it. So I think this is very consistent, for example, with what is asked for in the Head Start standards.

Chairman KILDEE. I have a question to both Dr. Earle and Dr. Morra. In this whole question of systemic reform which we have been talking about for several years, and we reported a bill out which almost passed, no one agrees exactly as to what systemic reform is. Everyone seems to be for it. Are there certain basic, essential components which a good systemic reform program should include? Could you tell us what some of those components are?

Dr. EARLE. Yes, I can give a try here. I think we know what it is. I think we do not exactly know how to do it. I think it is the strategy part that we are lacking, more than a knowledge of what elements need to be included.

From my point of view, I think we need to think of curriculum goals and standards, assessment systems, teacher development programs, and policy backup for all those things, in a way that makes them coherent and aligned with each other. Those are the pieces, it seems to me, you have to have right.

You have to have the alignment, you have to have the partnerships to create that alignment, and you have to have the content standards and assessments and teacher development going along the same track. They cannot be fighting each other or going off in different directions.

Once you have that piece together, then the issue becomes, How do you do that? That is where I think the NSF program is really attempting, through the States we are working with, to find some answers to that.

Chairman KILDEE. Dr. Morra?

Dr. MORRA. If our four districts were here, I think they would say to you that there are elements that are key. Those elements are starting with the standards, and that the standards are for all kids, and they all emphasize that it is critical they are for all kids, not just for some kids.

The standards have to be in all areas; they cannot just be in one, although you may have to start there. They think that eventually they have to be for all areas and for all grades. They believe that those standards should be tied into a curriculum. That curriculum, in turn, has to be tied into instruction. Teachers need to be trained, and they believe that is an absolutely critical part of the link. All this has to be tied into assessment.

They would feel strongly that those five areas are interconnected and must be linked. They would also feel that it is important that there be some local ownership and involvement in developing those standards.

Chairman KILDEE. Thank you very much.

Mr. Goodling?

Mr. GOODLING. Thank you, Mr. Chairman. I had one question for Rob, but since we spent 2 hours, most of which had nothing to do with Title IV, which is what the whole story was supposed to be about, I did not get a chance to ask him.

Chairman KILDEE. I will mention that to Secretary Reich.

Mr. GOODLING. Well, it was not all his fault. I am just sorry everybody else left now. Everybody is saying the same thing we have heard for the last 3 years, no matter where we have testimony: Would you please give us some flexibility? Would you slow down the categorical business? We could make better use of your money. We would serve children better. But they are all gone, so they did not hear your efforts yet. I heard flexibility come out of everybody again today.

For the record, the one concern I was going to mention to Rob, which he mentioned in his testimony, is that the language in Title IV is vague with regard to who will actually be responsible for the development of the skill standards and the related assessment and certification system.

The language in section 403(c) of the bill states, "The National Board shall invite and obtain the full and balanced participation of representatives from business and industry, employee representatives, and representatives from educational institutions, community based organizations, State government, appropriate State agencies, and other appropriate policy development organizations."

It does not say how the organizations will be selected or work together. There is no language requiring the partnerships of indus-

try, labor, and experts in the field of education and training be developed from the bottom up, which is exactly what they are doing presently with the grants that are out there. Nowhere is the word "partnership" even mentioned, and yet industry-led partnerships are what have proven to be critical to make the grants from the departments of labor and education work.

That, I think, is what Rob was explaining as one of his concerns with the way the legislation is put together.

I have a couple of questions for the witnesses. In the GAO report, I have a feeling that you had a strong focus on the need for long-term professional development in order for teachers to effectively assist their students in achieving high standards. In our hearings that we have been having, most of the people who have done something about this seemed to have used Chapter 2 money. Did you find Chapter 2 money being used for the training or retraining as they went forward with their reform efforts?

Dr. MORRA. We found some of the training was actually provided through external funding that the districts were able to secure. Local businesses sometimes provided some of the money. One district got a State grant that enabled them to do some of the training. Another district got some foundation funding.

Title II funds were not specifically mentioned, and it seemed to be that districts were using whatever they could lay their hands on to provide that kind of longer-term training.

Mr. GOODLING. In the testimony in the Chairman's district on Saturday, Title II was mentioned over and over again. In a hearing in my district, the day before, it was the one place they could get their hands on some money to do what you have to do if you are going to make any changes, and that is to train the people who are going to be on the firing line: administrators, supervisors, teachers, and so on. They made good use of Chapter 2 money. I just wondered whether these four districts used it in that manner. We have been cutting back on Chapter 2 money, so it makes it more difficult for them all the time.

The second question I would have is this. On page 15 of your report, at the bottom of the page, there is a footnote which indicates that service delivery standards could discourage some districts from implementing reform based on high content standards, if substantial resources are necessary to meet the related service delivery standard. This is what I have been trying to preach and preach and preach: we may discourage the people who need the reform efforts the most and need our help to provide some of the money because there is no way under the sun they can meet those delivery standards.

Not only on the bottom of page 15, but I think in your testimony you indicated a concern about whether they could or could not meet these standards and then would not be available for grants.

Dr. MORRA. There are some, certainly, in the field as a whole, and there is debate about whether delivery standards—sometimes called opportunity standards—are needed. We wanted to reflect that debate in our report. That certainly is an issue that many feel strongly about.

In our districts, I think it is important to mention that they ranged pretty broadly, in terms of per-pupil expenditures. We had

two districts that were over the average per-pupil expenditure and two that were really below it, one of which in particular was a very poor district with about a \$3,300 per-pupil expenditure.

That district would say that there is some ability to reprogram, to prioritize resources and try to undertake the systemwide reform. On the other hand, there is an issue with some of the school districts that are the type of school district that, let us say Kozol described in his *Savage Inequalities*. Can they do systemic reform at the same level, at the same time, with the same resources as a suburban school district?

Mr. GOODLING. Dr. Meisels, I appreciated your testimony. I am glad you mentioned Flint. My whole purpose, of course, of including the commission in my legislation came from the points you made with the goals panel and the encouragement of the goals panel to do that.

I do not see how we can determine what it is we are supposed to do, first of all, to have children ready to learn, and I do not know how we determine whether they are ready to learn if we do not go out and study the situation and get some recommendations. I do not know how we can handle goal number one without some kind of commission effort on that part.

Do you believe that the legislation that is before us would be better served if it included the early childhood commission?

Dr. MEISELS. I do believe it would be much better served if it were inclusive in that way. I have actively, for the last several years, worked with both the resource panel on Goal One and the technical advisory group and staff to the goals panel. I believe that the work we have done fits very well with the legislation that you are looking at now. I would hope that it could all be incorporated in some way.

The national commission that we are talking about here is something that would have an oversight role. It is something that would lend us some authority, as we attempt to do major innovation within the field. It is something that I think would be like an anchor—or perhaps a rudder is a better word—for you on the committee and for Congress in general and the Department of Education to know that we are going in the right direction. That is what I see it as doing for us.

Ultimately, the commission is not going to devise these assessments. The commission is going to have oversight over those who do devise them.

Mr. GOODLING. In the hearing in the Chairman's district on Saturday morning, I believe every one of them, at least all of those dealing with any kind of early childhood education, said, "Please, please stop asking us for standardized test assessments of these youngsters. It is devastating and accomplishes nothing."

Dr. MEISELS. It proves to be extremely harmful and very misleading. It is time that we take steps in different directions, steps that I think can be very productive for children and teachers and families. That is what we are laying out for you here.

Mr. GOODLING. In relationship to Dr. Earle, I understand that each State received \$2 million under the NSF program for math and science reform. Do you think that was a sufficient level of funding?

Dr. EARLE. Each State is eligible to receive up to \$2 million per year. Interestingly enough, in the first year, they did not all ask for it. They did in years two and three of the competition.

No, it is not enough, but it is enough to get started. I think that is one of the things we found. It is going to both cost more and take longer than our program. It is going to take more than the money we have available, and it is going to take longer than 5 years. I think the notion that this is a long-term effort is absolutely correct. But it does seem to be enough to get people's attention, to get them starting on the process, and to get them thinking about how to leverage the money.

Mr. GOODLING. Thank you.

Chairman KILDEE. Mr. Sawyer?

Mr. SAWYER. Thank you, Mr. Chairman. I began to think I was invisible down here. Everybody kept talking about how everyone else had left. I am not chopped liver down here, folks.

Virtually every one of you has talked about the importance of professional development and teacher training, the ability to elevate that element along with the expectations that you measure at the other end, and in fact, the importance of professional development in order to be able to use newer and more effective assessment techniques. Yet, I look at the majority of the Midwestern States and the way in which they are organized to deliver their services in the most fundamental ways.

I compare my State of Ohio often with a State that, for most of the last 20 years, has been roughly the same size, Florida. They have roughly the same blend of rural and urban areas and a population that is within a million or so of one another. My State has 612 school districts, and Florida has 66. I am not saying that Florida makes a lot of sense for Florida to have some of those districts as large as they are.

But I am absolutely certain that in Ohio—and, I suspect, Michigan and parts of Pennsylvania—there are districts that simply do not have the wherewithal, the capacity to develop the kinds of institutional support that systemic reform implies and demands in the kinds of things you are talking about.

Mr. Goodling is talking about flexibility and the need to ensure that. One of the ways we have tried to begin to build that in is to allow and in fact encourage districts to act in consortia, particularly in arenas like professional development, to move from the dog-and-pony show into something that is more lasting and more substantive.

Are there ways that we can do a better job, in terms of encouraging, provoking, and promoting that kind of joint activity, if in fact you think it is necessary and useful?

Dr. EARLE. I have a comment about that. One of the things we have learned through the NSF program is that a lot of States are developing a regional strategy to implement. Ohio is actually one of them. I do not know if it is recreating something that used to be or creating something new or a little bit of both. It does not take away from districts. Districts continue to exist and do what they do.

For some things, and I think professional development is definitely one of them, it makes sense to get together, in some other

pattern besides individual districts, to take a look at how to help teachers get additional skills, whether it is implementing content standards or a new assessment or whatever it is.

I would say that a good number of our States, and even some surprising ones like Rhode Island—you may think, “Well, Rhode Island does not need to divide itself into regions.” There is something about this notion of regions that are already there, as intermediate units of some kind, or creating them if they are not there for the exact purpose that you described.

Mr. SAWYER. Are there others?

Dr. MORRA. To some extent, I think that the districts would say that their own approach was unique and had to have the input of their community, their teachers, their principals, and so forth. Each felt strongly that there needed to be input into developing the standards, in developing the curricula, and aligning it to instruction.

They would do things, for example, like having different teachers become the instructional leaders to look into a particular package and see whether it was suitable. So there was a lot of work that goes with part of the teacher support that is directly in terms of developing that district’s specific approach. They would say that was important.

On the professional development side, it sort of crosses the boundary in that some of the development activity is actually a training activity. We have basically teachers who have stood up and done a lecture model, very often for many years. This whole system requires a very different teaching style. That kind of training has to start at why the district is reforming and what the reform is envisioned to look like. It has to continue on into teaching differently, teaching for the higher-order skills rather than the lecture format, working with groups, being much more of a coach than a lecturer.

That kind of professional development may have some commonalities across districts. But other parts of it, I think the district would still feel that it needed to sit down to develop its own system.

Mr. SAWYER. Dr. Meisels?

Dr. MEISELS. I would just like to say that we should not underestimate the complexity of reform. We should not underestimate the complexity of changing assessment and curriculum. This is, indeed, a very complicated matter. It is something that people have had a long time to learn how to do the way they do it now.

So whether it be systemic reform in math and science, whether it be systemic reform in early education or in assessment, this is going to take a long time. It is going to take a lot of support. I think that pulling together coalitions and consortia are very important. In fact, I cannot see how local districts can take some of these ideas and, on their own, implement them.

We are talking about standards development. We are talking about assessment development. For that, we should, I think, have a number of options—not a single option by no means—but a number of options or opportunities and as many supports as make sense, given our resources so that we can help people to do some-

thing. The doing of it will be so complex, let alone the development of it, that not all of us can do all of those tasks.

I do not think those 600 districts in Ohio or the 500 we have in Michigan or even the 64 in Florida can all do that. They do need us to create models and create incentives for adopting those models.

Mr. SAWYER. Thank you.

Chairman KILDEE. Thank you very much. I think that corroborates one of your ideas for an amendment, does it not? I think that was a very good question.

We have a similar situation in Michigan as you have in Ohio. We have one city in my district, a larger city of my district, that has three school districts. It is the city of Burton, Michigan. There is Bentley, Bendell, and Atherton. They would probably benefit by some type of possibility for a consortium, working together.

I really appreciate your testimony today. I really appreciate also your endurance and your patience. Scheduling around here is very difficult. We had to get the Secretary in. We will have a markup on this, hopefully, on Thursday. We have had Secretary Riley before, but Secretary Reich had not been here before.

I really appreciate your patience, your understanding, your endurance, and your tremendous help in your testimony this morning. It has been specifically helpful to us. It has not been generalities. Very specific things have emerged from your testimony that will be helpful as we draft this. So I want to thank you for that.

We will keep the record open for 2 additional weeks, even though we hope to have the markup on Thursday. That is one of the contradictions that exist around here at times. We will keep it open, nevertheless, because the full committee will still have the benefit of that testimony. We may even have some additional questions for you, which we will submit in writing.

With that, we will stand adjourned. Thank you.

[Whereupon, at 12:55 p.m., the subcommittee was adjourned, subject to the call of the Chair.]

HEARING ON NATIONAL SKILL STANDARDS

TUESDAY, MAY 18, 1993

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ELEMENTARY, SECONDARY,
AND VOCATIONAL EDUCATION,
COMMITTEE ON EDUCATION AND LABOR,
Washington, DC.

The subcommittee met, pursuant to call, at 9:35 a.m., Room 2175, Rayburn House Office Building, Hon. Dale E. Kildee, Chairman, presiding.

Members present: Representatives Kildee, Miller of California, Unsoeld, Roemer, Green, Woolsey, Strickland, Payne, Goodling, Gunderson and Roukema.

Staff present: Susan Wilhelm, majority staff director; Tom Kelley, legislative associate; Jack Jennings, education counsel; Omer Waddles, staff director, Subcommittee on Postsecondary Education and Training; Jay Eagen, minority staff director; Nichelle Carter, system manager/staff assistant; Mary Clagett, professional staff member; Randel Johnson, labor coordinator; and Andy Hartman, education coordinator.

Chairman KILDEE. The Subcommittee on Elementary, Secondary, and Vocational Education convenes this morning to discuss Title IV of H.R. 1804 which proposes to establish a National Skills Standards Board.

Secretary Reich appeared before this committee May 4 and testified that the establishment of skill standards within industries is critical to raising and training the skill levels of all workers. Today's hearing was scheduled in order that members could have another opportunity to discuss the issue raised pertaining to Title IV.

And shortly, I think, Mr. Goodling is on his way here. We would recognize him for an opening statement. Other than that, my usual procedure, I will get the witnesses up to the table and then we will save our questions until after their testimony.

So our witnesses this morning are Cheryl Fields-Tyler, American Electronics Association; Marc Tucker, President, National Center on Education and the Economy; Margaret Piesert, Director of the Health Care Workforce Project, Service Employees International Union; Raul Valdes-Pages, President and CEO, Denver Technical College; Mike Barood, Senior Vice President for Policy and Communications, National Association of Manufacturers; Dr. Paul R. Sackett, Professor of Schooling in Labor and Industrial Relations, University of Minnesota. If they would come up to the table, please.

STATEMENTS OF SHERYL FIELDS-TYLER, AMERICAN ELECTRONICS ASSOCIATION; MARC TUCKER, PRESIDENT, NATIONAL CENTER ON EDUCATION AND THE ECONOMY; MARGARET PIERSERT, DIRECTOR OF THE HEALTH CARE WORKFORCE PROJECT, SERVICE EMPLOYEES INTERNATIONAL UNION; RAUL VALDES-PAGES, PRESIDENT AND CEO, DENVER TECHNICAL COLLEGE; MIKE BAROODY, SENIOR VICE PRESIDENT FOR POLICY AND COMMUNICATIONS, NATIONAL ASSOCIATION OF MANUFACTURERS; AND PAUL R. SACKETT, INDUSTRIAL RELATIONS CENTER, UNIVERSITY OF MINNESOTA

Chairman KILDEE. Unless you made arrangements among yourself in order of testimony, we will proceed in the manner which I called. That would be Ms. Cheryl Fields-Tyler.

Ms. FIELDS-TYLER. Good morning, Mr. Chairman and members of the subcommittee. I am happy to be here this morning.

My name is Cheryl Fields-Tyler. I work with the American Electronics Association. I direct AEA's activities in workforce policy and practices, and I am directing our demonstration project funded by the Department of Labor to explore this whole area of voluntary skill standards.

I want to start off with a story. Over the past year or so, I have been spending a lot of time out in our companies to try to ascertain how the world of work is changing and why as an industry we need skill standards.

One particular place we visited several weeks ago is a large electronics telecommunications manufacturing company. We met with four frontline workers, hourly workers, all of whom had been with the company at least 15 to 25 years. Across the table from us they sat and explained to us how their jobs had changed.

Number one, until about 4 years ago they literally had to raise their hands on the manufacturing floor to consult with a peer sitting next to them. They had to make an appointment, basically, to use the rest room facilities. It was a very typical Tayloristic, segmented work type of environment, very high pressure, very isolated, very uncollaborative, and in no way were the frontline workers consulted or involved in the work product process.

Over the last 3 to 4 years an unbelievable transformation has taken place in that company. The people that 4 years ago had been in this very isolated work environment are now doing cost control, are doing production scheduling, are ordering their materials directly from outside vendors.

These are people with high school diplomas. Most of them have been in their jobs, again, for 20 and 25 years. They have been re-trained after being on the job for that long. It was wonderful.

A wonderfully mature woman, probably in her late 50s, talked about the skills that she had learned in her workplace and how that had impacted the way she interacted with her grandchildren because she had learned new communication skills, new ways to even work with her own personal finances. It was a fascinating story.

I share that with you to try to give you some insight into how the world of work is changing in my industry.

AEA represents the high-tech industry broadly conceived. We are over 35 SIC codes, almost 3,000 member companies in our association all over the country. Eighty percent of our member firms are under 200 employees so we are really at the forefront of the small company entrepreneurial spirit in this country. We are the toolbuilder for the rest of the economy in many respects.

And we are also an industry that, when you look at us, you would automatically think innovation. That is what drives the competitive advantage in our industry.

I am here to tell you this morning that innovation no longer makes it in even our industry, where research and developments still are very key to our competitive strength. The real strength for many of our leading companies is their workforce, the ability to tap everyone from the janitor to the CFO, from the frontline, direct-line labor force to the people in the accounting department to get involved in improving work processes, to improve the product and the value delivered to the customer and to the stakeholders of the company.

What this means is new demands for skills in these workplaces. People who used to do nothing but sit in front of one work station, do one thing over and over again, are now doing work scheduling and production scheduling. I think that that gives you some idea of how these skills have changed.

In a word, the reason why we are interested in doing this standards project and the reason why I am here today to talk specifically about the National Standards Board is that we think standards are very important, and, in fact, we would argue probably a vital tool to beginning the transformation of our workforce on a broad scale to be able to compete more effectively in worldwide markets.

The problem is not just skill deficit. And I want to make that issue clear because oftentimes you will hear that the problems are always we just don't have the skills. It is also a problem that we don't have any way to recognize the skills that we do have.

And that is really the key of skill standards. It not only identifies the performance benchmark that we should aspire to if we are going to be world-class performers in a worldwide economy, but it also is going to give us the way to demonstrate to individuals who get those skills and to companies who inspire those skills in their workforce a way to let people know that they, in fact, have them. It is a very important distinction.

The way that we are going about this is we have selected three broadly defined occupational clusters in our industry that are very, very important to the competitiveness of our industry long term. The three that we have selected, I am going to go over them here for you in just a moment, but it is important to realize that what I am going to tell you is not the typical job definition in the old style of defining jobs.

I am really talking about more critical functions in a high-performance workplace, high performance meaning where employees are empowered from the very lowest level of the company to the very highest, and that those levels are getting flattened out so there may not be much more than four or five levels in many of our companies, especially the small ones. But that empowerment goes again from the factory floor clear to the executive board room.

The three occupations that we are looking at this year—again, they are broadly defined occupational functions—are manufacturing specialist; pre- and post-sales analyst, which is a mouthful but what that really means is the person both before a sale and after the sale of a product is interacting on the frontline with the customer and inputting customer requirements back into the design and production process; and the third one is administration services and information services support, what the old clerical function has evolved into in these high-performance companies where you never see a secretary doing the same kind of work a secretary did 5 years ago. They are utilizing power technology tools. They are learning new versions of technology on a daily basis almost. They are constantly translating information across all different kinds of functions within the workplace.

I think many people when they hear us start to describe what those occupations are wonder, well, where is the electronics in any of those occupations. And it is a good question. But it is an important aspect of our vision of how national standards work is that these occupations are broadly conceived.

The way that we are going to go about this is that we are imagining that these functions have a certain content that is very specific to the high-tech industry, but it is also going to have a lot of core skills and abilities that would transfer across all of these jobs probably within our industry but likewise outside of our industry to other industry groups. Let me give you an example.

The way that we are going to be defining, for instance, what it takes to be a manufacturing specialist, there is three components to it. One is getting a very good understanding of how that role functions in a high-performance, high-technology workplace. Number two is identifying the competencies, what do you have to be able to know, do and apply in order to be a full-fledged manufacturing specialist, someone who is really good at your job. The third component of the standards is the performance criteria, how do you know when it is done well.

All those three things together go together to make a standard. That is what our standards are going to look like. Say for the manufacturing specialist, we have 30 competencies and sets of performance criteria to be a manufacturing specialist at world-class levels of performance in our industry. Maybe 10 of those are going to be in common with what it takes to be a pre-, post-sales analyst, so that you start to see kind of a modular approach.

There are going to be whole groups of competencies that cut across lots of different jobs within our industry. Likewise, if you are going to be a manufacturing specialist in the food processing industry or in the automobile processing industry, manufacturing industry, perhaps eight of our competencies are also going to be found in those two industries as well.

The goal here is portability of these credentials across broad sections of our labor market in this country. It is moving away from the idea that training is to train you for your next job, and it is moving toward a vision of training for your next job and also training for long-term employability, high-skill, high-wage jobs.

That being said, I would like to talk a little bit about why we think it is very important that this skill standards board be char-

tered and be chartered correctly. The most dangerous thing that we could have in this country is to have lots of different parallel industry standards running up against each other without this portability across various industries. It is going to put us right back where we are right now where when we have downsizing and labor market sort of overages in some industries. We are going to have no way to transfer those skills across industry and no way for workers to know what it is that they are able to know and do that can transfer across a whole variety of workplaces.

This national board has the promise of giving us that kind of national system by bringing all the stakeholders together at the table under industry leadership. And I think that is a very key point, and I will talk a little bit more about that later.

We can come, I think, to a point where industries at various levels own the system within their own industries, but they see themselves fitting into a national system that all the stakeholders own together, workers, government, educators, industry. Those are the primary stakeholders in our view. Again, the national board has the promise of being that.

We have some concerns in the way that the current language reads that we think may actually block that promise, and I want to bring those things clearly to your attention.

I already mentioned the need for industry leadership. Speaking from an industry point of view and also as project director of my project, and also because my primary customers are the government, because you are funding and helping us become a catalyst for this, workers in our industry and also educators, both K-12 and community college and vocational technical educators.

We realize that every stakeholder has to be at the table, but, likewise, if industry does not perceive that it is leading this and at some deep level perceives that it, quote, unquote, owns the system, you will not get the full-fledged, rich participation of industry over the long term. The bottom line of that is that the standards are going to lose their value and currency over time.

And that is a very important point. If these standards are actually going to be very valuable to the people who get them, industry has to be the one who recognizes and values them. And employers, basically, have to be the ones who recognize and value them.

We would argue very strongly that the chair of the board be an industry-based individual. Likewise, we think that a majority of the representatives on the board should be from business, industry, and include trade and professional organizations. We would argue that trade and professional organizations can play a very important bridging role to the various industry constituencies that need to be represented in this interest but cannot be with just eight seats at the table from industry representatives.

Likewise, the legislation should be very clear that the standard development is propagated by industry-led coalitions of the appropriate stakeholders within the criteria set by the overall board. Again, this is a very critical tension to hold in mind as we try to charter this board, that the board doesn't necessarily—the function, in my opinion, is not that the board sets standards. It is going to draw from the very best that we have in this country to endorse

standards that industry develops with regard to all of its stakeholders.

With regard to the way that the industries work within this proposed board, we would suggest that the legislation should not prescribe in any further detail the stakeholder representation within the industry committees or, however they are conceived, the groups that bring forward the standards. This is a very important point because not every industry looks the same.

My industry is about 3 to 7 percent unionized. We are very happy to have union workers working with us at the table as we work through these standards, and, in fact, many union workers are going to be involved in our focus groups. But the other 97 to 99 percent of our workers that are not represented by unions likewise must be involved and have some way to provide input.

This is a very important point because we cannot be too proscriptive or we are going to lose a lot of the richness of our current workforce and their input. And I would argue that that is a very important component to making the system work. The board functions must be clearly defined so it is clear that the board's role is not to set standards but it is to identify those occupational roles and the clusters of industries that need to work together to create standards across broad industry groups.

Again, this is a convening and facilitating and endorsing function, and we think it should be very carefully worded to stay that way.

A more sort of specific point but in the long run I think equally important is that the definitions in Title IV must reflect the best of what we know now and how the standards will look in the future while avoiding proscriptive language.

In short, AEA hopes that the committee can clarify some of these issues and rework the language of the bill so that this measure can receive the good and full support of business and industry. We really want to be a player in this. We really want to make a difference for our workforce, for the competitiveness of our own companies as well as for the Nation. We think this is very important work. We are committed to help prepare America's workforce for the rigors and high rewards of high-performance work because the electronics industry, again, is starting to see more and more that our strategic advantage in worldwide markets is our workforce.

Voluntary standards will be an invaluable tool to create and maintain a U.S. workforce that is demonstrably world class, and a world-class workforce is the key to attracting and keeping the high-skill, high-wage jobs that America needs.

Thank you. I would be glad to entertain your questions.

Chairman KILDEE. Thank you very much.

[The prepared statement of Ms. Fields-Tyler follows:]

**TESTIMONY OF CHERYL FIELDS TYLER,
AEA DIRECTOR WORKFORCE EXCELLENCE AND
AEA VOLUNTARY STANDARDS PROJECT DIRECTOR,
AMERICAN ELECTRONICS ASSOCIATION
BEFORE THE SUBCOMMITTEE ON ELEMENTARY, SECONDARY AND
VOCATIONAL EDUCATION
UNITED STATES HOUSE OF REPRESENTATIVES
ON HR 1804, GOALS 2000 TITLE IV**

Mr. Chairman and members of this distinguished committee, good morning. My name is Cheryl Fields Tyler and I direct education and workforce policy and programs for the American Electronics Association--also known as the "AEA." I very much appreciate the opportunity to brief you on AEA's U. S. Department of Labor-funded pilot study of voluntary workforce standards and to share with you our vision of the benefits such standards can provide to current and future workers, high-tech employers, educators and trainers. The Subcommittee is to be commended for your interest in this issue of great importance to the high-tech industry.

First a word about AEA and the industry we represent. AEA was founded in 1943 by 25 California electronics firms. Since that time, AEA has grown to represent more than 2,700 companies from all segments of the high-technology industry, from silicon to software, telecommunications to defense. Over 80 percent of our membership are small, entrepreneurial companies with fewer than 200 employees.

Electronics is the nation's largest manufacturing sector with approximately 2.4 million American workers employed directly in the industry. This is about three times the number of employees employed directly in the auto industry and about nine times those of the steel fabrication industry.

World-wide sales of U.S. electronics firms now total over \$400 billion per year. Electronic products are pervasive throughout U.S. business, industry and private life. Moreover, as the tool builder for the rest of the economy, the U.S. electronics industry is key to innovation, manufacturing, service, and productivity throughout

the U.S. and the world.

In November of 1992, the U.S. Department of Labor announced that AEA would receive a \$300,000 grant to undertake the first 12 months of pilot study of competency-based, voluntary worker standards for the high-technology industry. Through our pilot study, we believe we are creating a promising, dynamic model of voluntary industry-based standards development based on ground-breaking government, business, education, and worker collaboration. I would like to share with you why AEA believes this work is critical to safeguard the economic vitality of America's workers and employers, and some critical factors that must be successfully addressed if the emerging national voluntary skills standards system is to truly benefit U.S. students, workers, educators, and employers.

Working Smarter

The hallmark of America's high-tech industry has been innovation. But in today's business environment, it is not enough to innovate. Within three to six months, competitors will produce a similar--and often cheaper and higher quality--product. Furthermore, competitors are fully able to outpace U.S. companies in investment in plants and equipment, making it difficult, if not impossible, to sustain market preeminence through capital investment alone.

The sustainable advantage in today and tomorrow's marketplace is the ability to take innovation and continuously improve the work processes that speed and improve design, manufacturing, distribution, customer responsiveness, and marketing. The absolutely critical component to improving work processes is highly-skilled people--from the receptionist to the engineer, from the facilities manager to the financial officer.

The dawn of the Technology and Information Age has given us new tools--and new challenges--for making work more productive. Yet, the majority of America's workplaces are designed for--and our labor force educated for--the mass production, segmented work models of the past. Our nation must learn to work smarter--especially as we face international economic competition that is making enormous investments to increase their own economic productivity.

The world's leading companies are learning what it means to "work smarter." Companies of every size--and in virtually every segment of the economy--are bolstering productivity growth by creating "high performance work organizations" that focus on continuous improvement of work-processes. In such workplaces, highly skilled people utilize effective training, teamwork, technology, and information tools to achieve major strides in product innovation, quality, customer responsiveness, and time-to-market.

Employees in such work organizations are empowered decision-makers. Management layers disappear and bureaucracy decreases. Front-line workers' skills increase as they assume many tasks formerly reserved for managers.

"High performance work organizations" structured in this way require a "high skills workforce." Not only must such workers be equipped with basic skills and content knowledge. In high performance workplaces, employees in virtually every job function must be able to make wise decisions, use technology and manage information adeptly, communicate effectively, and work in teams toward common goals--and do so at levels of competency benchmarked to world standards of excellence.

The Role of Standards

AEA is seeking to demonstrate how voluntary standards can be developed and maintained because we see tremendous potential value to our work--for us as an industry and for our workforce--but also for us as a nation.

We do not believe worker standards are a panacea to cure us of our education and training ills. We do believe, however, that if the system is constructed well voluntary industry-led, developed and managed worker standards can be an invaluable tool. For example, such standards for the high-tech industry could:

- Become a catalyst for employers to spur the shift to high-productivity, high-performance work--which means creation of high-skill, high-value added jobs, a more competitive U.S. economy and greater front-line worker empowerment;

- Communicate more clearly to education and training institutions the skills workers need to succeed and the training strategies that can prepare workers long-term employability in high performance jobs.
- Increase worker opportunity and industry-wide recognition of skill attainment;
- Create clearer career path options for current workers and career opportunities for new entrants;
- Communicate more clearly to the K-12 community the "core competencies" that high-school graduates need for employability in high-skill, high-wage jobs;
- Maximize benefits of training expenditures while reducing costs for remedial training; and
- Strengthen U.S. trade capability by aiding company efforts to comply with international skills standards.

Electronics industry voluntary worker standards would be of particular value to the small and medium-sized employers that make up over 80 percent of AEA members. Such benefits include ready access to benchmarking data, skill analysis tools, training that reflects industry needs, and workers with the skills needed to speed the conversion to high performance work.

The AEA Pilot Study in Voluntary Standards

I want to give you a brief description of AEA's vision of voluntary standards and how we are going about developing them. One way to think of our work is in the common business "customer-supplier" relationship. We see voluntary occupation standards as one key industry effort to become a much better "customer" of America's education and training system by defining what are the skills needed for long-term employability in high-skill, high-wage jobs.

So in our effort to be a "better customer" we have designed our pilot to have four

main components:

- Identify competency-based, world-class standards for three non-baccalaureate-degreed "high-performance" industry occupations,
- identify gaps in current training and identify effective training strategies to reach the AEA-identified voluntary standards through grassroots field-studies at 5 AEA U.S. locations (i.e., Washington, Oregon, California, Massachusetts, Colorado)
- ascertain feasibility, value, and options for assessment of performance to AEA-identified benchmarks, specifically including the feasibility of "portable credentials" for those workers who meet the AEA standards, and
- communicate findings to foster industry, educator, worker, and government understanding of the value and potential limitations of voluntary worker standards for the electronics industry.

Right now we have identified three critical occupations for the high tech industry are in the process of developing standards. The three occupations we are studying are: manufacturing specialist, pre/post sales analyst, and administrative and information services support. It may be helpful to note that these are not "jobs" in the traditional sense that we now have in our Directory of Occupational Titles. Each is really an "occupational cluster," that is, not a narrow definition of a job, but a functional definition of critical roles in high tech workplaces that may encompass any number of "job titles."

Our goal in standards development is to fully define the function of these roles in high-tech workplaces, identify the competencies necessary to fully fulfill the role--that is what one needs to be able to know, apply, and do--and identify the key indicators of proficiency, that is what tells you that this job is being done well. It is important to note that in our vision standards encompass all three of these areas: function of critical roles, competencies necessary, and performance criteria--all related to the actual work to be done yet also encompassing those skills that are critical for long-term employability in a rapidly changing work environment.

The way we are defining the standards and how we see updating them to keep pace with the way work in changing is also a critical piece of our vision. In short, we are going to the experts--the people who do and supervise these functions everyday in high-tech workplaces around the country. Through focus groups with high-tech industry workers we will learn what it takes to do these jobs well--and how you can spot a job well-done when you see it. The "draft standards" generated from the focus group research will then be presented to groups of stakeholders throughout the year to validate and fine-tune the standards.

We will also conduct a feasibility study of what assessment options will work to both give individuals meaningful "portable credentials" that signify competency attainment while also giving employers a set of tools to know what workers know and do. Assessment is a critical piece to creating a national system that will be valuable both to employers--but especially to workers. It is also the most complex--but that should not stop our efforts. For in the end if the standards developed are to be valuable to the individuals who work and study to achieve them, we must develop nationally recognized ways for people to demonstrate what they know and are able to do.

We see the system being modular in the sense that people would get certified in the competencies of an occupation--almost like a sophisticated scout "merit badge" system. In such a modular system, many competencies might apply to several different job roles in several different industries--while others are more specific to the work processes of a certain industry.

Why this effort needs to be National--but not Federal

To get at why we believe that this effort needs national encouragement and facilitation, think again about the occupations we have identified as critical to the high-tech industry--manufacturing specialist, pre-post sales analyst, and administration and information services support. Not one has electronics in the title. What does that mean?

The bottom-line is that we wanted to demonstrate in our first year what the full potential--and where the most need is--for occupational standards. We self-consciously selected occupational functions that while having a "high-tech" content

also will likely have a tremendous amount in common with similar roles in other manufacturing industries and service industries.

This point is critical to our vision of the role of standards. At a most fundamental level, standards should be a tool to create highly skilled American workers that are not just trained for their next job, but who are also equipped with the employability skills needed for high-skill, high-wage jobs in the future. The only way we can get to that goal is to have a system that allows for core elements of standards to cut across multiple occupations and multiple industries.

Let me share with you a concrete example of what I mean. For the sake of this example, let us say that we discover that there are 30 competencies to be a manufacturing specialist in the electronics industry. Perhaps 10 of those competencies will also be critical to the pre/post analyst role--helping people move laterally or diagonally within the electronics industry. But, to take it one step further, one might also discover--and we think we will that there are also common competencies across various industries. So that maybe out of the 30 competencies it takes to be a manufacturing specialist in the high-tech industry, 12 of those are common to the automobile manufacturing industry, and likewise 8 are common to the food processing industry.

AEA's Position on Title IV: The National Skill Standards Board

The vision is portability within a national system that is accessible to current and future workers is what prompts us to support this title of the Goals 2000 bill. Without such a national body chartered to convene, encourage, and enable the industry-led development of standards we run the very serious and sobering risk that we will end up with many industry systems that do not talk to each other systematically nor to the various stakeholders who have a genuine interest in the standards.

Our support of this title is guarded, however, given these specific concerns:

- If standards are really going to be a valuable tool to the key stakeholders--that is to current and future workers, the education and training community and to the government--America's employers must perceive that

they are at the forefront of this effort. Without such a clear leadership role, employers simply will not participate fully--and thus the standards will lose their value and currency. AEA recommends that the board be made up of a majority of representatives from business and industry, including trade and professional associations and that workers--both union and non-union--be included as well. Moreover, we suggest that the first chair of the Board be an industry-based individual. Moreover, because of the critical role that we envision for community and junior colleges in this new system, we also suggest that representatives of such organizations make up a substantial number of the education component on the Board.

- The legislation should be clear that standard development is propagated by industry-led coalitions of the appropriate stakeholders. The legislation should not, however, proscribe in any further detail stakeholder representation with regard to the industry-led coalitions which develop standards. Such proscriptive language would derail the broad industry support and commitment necessary to make standards truly beneficial to all. In every way, the system must be a voluntary mutually beneficial collaboration of the stakeholders. This legislation can help facilitate such a system, but if it tries to proscribe it, the effort will fall short.
- Board functions must be clearly defined so that it is clear that the Board's role is to identify occupational roles that cut across industries and encourage industry coalitions to work together to define standards for such roles. At no time should the Board "set" standards. Rather it should spur industry-led coalitions of the appropriate stakeholders to develop, communicate, and implement voluntary standards.
- The definitions in Title IV must reflect the best of what we know now of how standards will look while avoiding prescriptive language. For instance we suggest that the "skill standards" definition be rewritten to encompass all three of these areas: function of critical roles, competencies necessary, and performance criteria--all related to the actual work to be done yet also encompassing those skills that are critical for long-term employability in a rapidly changing work environment.

AEA hopes that the committee can clarify some of these issues and rework the language of the bill so that this measure can receive good business and industry support.

The Workforce as Key Strategic Advantage

AEA is committed to help prepare America's workforce for the rigors and rewards of high-productivity, high-performance work because the electronics industry views its workforce as a crucial strategic advantage as we compete in global markets. Voluntary worker standards will be an invaluable tool to creating and maintaining a U.S. workforce that is demonstrably world-class--and a world-class U.S. workforce is key to attracting and keeping the high-skill, high-wage jobs America needs to maintain its economic health and the standard of living of its citizens.

I would be happy to answer your questions about my written or oral remarks.
Thank you.

Chairman KILDEE. We will go to our next witness and come back and ask questions of the panel. Mr. Tucker.

Mr. TUCKER. Thank you, Mr. Chairman.

My name is Marc Tucker. I am President of the National Center on Education and the Economy.

The proposal that you are here discussing for a National Skill Standards Board is, in fact, a central idea in the much larger proposal for creating a national skill development system for the United States which many of us believe holds the key to American competitiveness in world trade.

And, in fact, in the future of our achievement there is a very broad consensus, I may say, around the principal elements of this design, and it comes out of the work of the Commission on the Skills of the American Workforce, which our organization assembled in 1989. That Commission was chaired by Ira Magaziner and was co-chaired by Ray Marshall and Bill Brock, Democratic and Republican Secretaries of Labor in the Carter and Reagan administrations. And it had on it a number of leading American CEOs, labor leaders, governors and civil rights leaders, including, I might say, John Jacob and Eleanor Holmes Norton.

They worked for over a year, and their work was supported by the largest research study that has ever been done of the relationship between the skills of a country and its economic future. That study was conducted in the United States, Germany, Sweden, Denmark, Ireland, Japan and Singapore.

The report, *America's Choice*, was issued in 1990. When it was issued, we began a major effort to see that it was implemented throughout the country. Hillary Clinton, then a partner in the Rose law firm and a member of our board of trustees, directed the implementation effort.

I will try and summarize for you in a few lines what that 125-page report said. It started by pointing out that real wages in the United States have been dropping steadily over the last 20 years. And it pointed out as well that this was clearly not an inescapable consequence of the pulling together of the international economy. It is clear that that is not the case because, as it pointed out, a number of our competitors were experiencing real improvements and steady improvements in their great productivity growth and in real wages even as ours were holding steady or going down.

What we concentrated on was the difference. Why were those nations experiencing the economic growth and stability while we were becoming steadily a poorer country? The one-phrase answer to that is high-performance work organization. What we discovered was that in those countries that were succeeding economically, advanced industrial countries, work was being organized quite differently than it is generally in the United States.

What they are doing in the companies and in the industries in those countries that are succeeding is assigning to people on the frontline the duties and responsibilities that we typically assign only to management or to professionals. It is precisely the kind of transformation that Cheryl was just describing to you. And it is taking place in the American electronics industry and in a few other industries, but we discovered on balance only 5 percent of

American firms were moving in that direction and 95 percent were not. The numbers are quite different in other countries.

We, in effect, were competing on wages and hours with the Philippines, Thailand and Mexico, while other countries were competing on quality with Japan and Germany. The future for this country, if we follow that path, is a future of low wages and spreading poverty. The alternative is to compete on quality.

The only hitch, however, in employing high-performance work organization, is that it means that the frontline needs to be nearly as well educated and trained as are your managers and professionals. You have to ratchet up the entire system, and we have to do that very quickly.

Everything depends on the frontline, the 70 percent of our workforce whose jobs do not require a baccalaureate. When we looked at what these other countries were doing to make sure that their frontline was up to that task, there were a lot of answers. But a crucial part of the answer was standards. There was not a single country that we visited that was producing first-class high school graduates and highly trained workers that did not have a system of clear standards. And wherever we went where it worked, those standards were linked to assessment without exception.

Now why is that? It is, in part—and let me just talk about the piece that this panel is talking about today. It has to do with how you motivate people, workers and students, to put in the effort, the time and the money that it requires to become highly skilled.

In those countries that have explicit skill standards of the kind that you are now talking about, that are broad, that are set with the leadership, as Cheryl just said, of industry, with the participation of labor and education, where it is known that you have to achieve that high standard in order to get a good job in a good-paying industry, then people will put in the years of time, the dollars and the effort required to reach the standard. And when there is no standard, they will not.

You can't have an effective system, we concluded, without standards. And you can't make the standards real without assessment. To have a standard without assessment means, in essence, there is no standard. It is only when somebody says, here is the exam you have to pass, that the standard in effect becomes real.

That is why we need standards. That is why we need assessments. And that is what leads us to a National Skill Standards Board. Why national and why a board and why does government need to be involved? In essence, because, again, what we found as we looked over the rest of the world was that what we are lacking and what those other countries have is a system.

And Cheryl, in essence, just explained why. You need to have standards in place in a country in which people are mobile; that is, will move among firms over time. But if those standards are too narrow, you will create a rigid economy. People will be trained just for this thing. And if technology starts to change and consumer taste starts to change, they will resist the changes that are required because that is all they know how to do.

If you have very broad standards, as Cheryl just said, and things are not going well in one piece of the electronics industry, they will be able to move easily into another piece. And if things are not

going well in the electronics as a whole, they will be able to move into other industries that have common skill requirements with the electronics industry.

If you don't have the mobility, you are dead. You will create a rigid economy that will slowly fall behind other economies that are able to change much more quickly with changing technology and changing consumer tastes. To create a system in which you can do that requires a body, a single body. It is only the Federal Government that can provide the catalyst for creating that body.

The States, since the issuance of America's Choice in 1990, have been working hard on skill standards for professionals and technical people. They have almost stopped their work in that arena because each State that has been working on it has concluded that they can't build a system just for that State. We have got to have a national system. And they are, in effect, waiting on the Federal Government to take the lead.

As Cheryl just said a moment ago, in the electronics industry they have concluded, both for the good of the industry and for the good of the country as a whole, they need standards that link up to the standards in other industries. It is my understanding at the moment that there is serious discussion in this committee about decentralizing a great deal the setting of standards; that is, having the board itself simply carve up the world into a set of arenas and then delegate the setting of the standards almost entirely to committees organized along industry lines.

In my view, this would be a very serious error. What that would lead to is not one system of standards but 20 or 30 or 40 systems of standards in the United States. Whereas other countries are working toward merging standards, creating larger systems with fewer standards in them, we would be struggling with cacophony.

I would hope that it would be possible to design a system in which the committees in effect that were working in particular arenas had considerable autonomy but within a set of rules, if you like, on system building that were created by the national board and in which what they came up with, to use a word Cheryl used a moment ago, the standards that they came up with had to be endorsed by the board as a whole. That, in my view, is the only way we will get to a system.

It is essential in my view and, by the way, this was a central conclusion as well of the General Accounting Office study on this subject, that the employers have a very strong sense of ownership of this system. It is very important that labor participate strongly and that educators participate strongly and I believe that the civil rights community participate strongly. But if employers do not end up with a sense of ownership of this system, then they will not use these standards in the employment and promotion of people. And if they don't do that, then there is hardly any point in getting out of bed. That is the whole purpose.

It is in that act of taking the standards seriously in employment decisions and promotion decisions that the whole system becomes real and of use. It is only in that way that it will motivate people to get the skills they need to make our economy work.

Last point. As I see it, this system of standards that you are here discussing today could become and should become the central hinge

around which this country builds a whole labor market system. These standards should be the standards against which people study as apprentices. They should be the standards against which people work when they have been dislocated from one industry and wish to qualify for work in another. They should be the standards that our government-supported job training programs work against in all of their various activities. We should have one system of standards driving all of these various aspects of our human resources development system. If we do that, I believe, we can produce a system which is as effective as the best in the world.

We have a long way to go from where we are to get there. We can get there I believe in pretty short order but not without this board which is here proposed.

Thank you very much.

Chairman KILDEE. Thank you.

[The prepared statement of Mr. Tucker follows:]

Marc Tucker

Thank you, Representative Kildee, and the members of the Committee, for the invitation to speak with you today. I am Marc Tucker, president of the National Center on Education and the Economy. Four years ago, the Center created the Commission on the Skills of the American Workforce, whose report, *America's Choice: high skills or low wages!*, inspired the legislative proposals that are the subject of today's hearing. I served as a member of that Commission and helped to draft the report. Following release of that report, Senator Kennedy joined with Senator Hatfield, Congressman Gephardt and Congressman Regula in introducing companion bills in the Senate and House designed to provide a legislative framework for making the recommendations contained in *America's Choice* the law of the land. Since then, those bills have framed the national debate on federal policy on workforce skills and served as a focal point for a developing consensus among the actors who must be involved.

Three years ago, when the Commission's report was released, Hillary Clinton was a member of the Board of Trustees of the National Center, and I asked her if she would lead the effort to implement the Commission's recommendations, to which she agreed. Her husband, then governor of Arkansas, was deeply involved in school restructuring and workforce skills issues, both in the state and in his leadership role in the National Governors' Association. So it is hardly surprising that President Clinton's educational reform bill includes a proposal that was a hinge point of the Commission's report and of the High Skills, Competitive Workforce Act of 1992 — to create a Board that would set voluntary professional and technical standards for a wide range of jobs not requiring a baccalaureate degree.

Thinking about technical skill standards

But why do we need technical and professional skill standards at all? In answering this question, it is helpful to imagine a dimension line at one end of which are the Japanese and the other end of which are the Germans.

Consider the Japanese. One third of employment in Japan — by far the most desirable third — is in the large, lifetime-employment firms. These firms regard entry level labor as they do any other valuable input, and they contract for it with reliable suppliers, with whom they work very closely, as they would for anything else. In this case, the suppliers are 'contract high schools.' Each plant has relationships with a few high schools from whom they recruit every

year.

In the spring of the year, they ask the principal to recommend a certain number of students for employment. The principal has a strong incentive to recommend only very highly qualified students, because entry into Japanese high schools is competitive, and if it got out that a firm like Toyota had dropped her high school as a source of entry level labor, the principal of that school would be in deep trouble. What the principal takes into account as she makes her recommendations are the courses taken, the grades received, the recommendations of the teachers and the scores on examinations.

Now take the Germans. If a secondary school student in Germany wants to go to work for Daimler-Benz and build Mercedes automobiles, she must first be offered an apprenticeship contract at Daimler. What will Daimler take into account in deciding who gets offered a contract? The answer is the courses taken, the grades received, the recommendations of the teachers and principal and scores on examinations.

Let's take a look at what is going on here. First, both systems provide very strong incentives for achievement in school and in postsecondary education and training that are wholly lacking in the United States for students who do not expect to go to a selective college. Though there are clear differences in these two systems — which we will get to in a moment — the point on which they converge is sending the strong signals to students who do not plan to get a baccalaureate degree that it pays to meet high academic standards in school.

But that is where the similarity ends.

The large, lifetime employers in Japan are like a family. They expect people on the front line to do whatever is necessary to make the firm successful. That probably means many very different occupations during a lifetime of work. Because that is so, the firm is not particularly interested in the occupational skills of the people they hire. What they care about — and the only thing they care about — is capacity and appetite for continued learning. This quality they call "general intelligence." Unlike us, they believe that the most important component of general intelligence is effort, and the least important is inherited aptitude. What they want from the principal is the names of those students with staff recommendations and scores

indicating they have the highest capacity for continuous learning.

Once these Japanese firms hire an entry level worker for the front line, they will provide all the occupational education that is necessary. When we visited Toyota in 1989, we were told that the firm was planning to give every new hire for the assembly line two full years of full-time instruction in digital electronics and mechatronics before putting them to work. These workers will have the skills of what we here in the United States would think of as junior engineers.

The Japanese do not have universal, formal skill standards, because they do not need them. Because the worker stays in the firm for all or most of his working days, and because the firm knows what its own standards are, there is no reason to have standards that extend beyond any given employer.

The situation in Germany is utterly different. In Japan, if you ask a worker what she does for a living, she might say she works at Toyota. But, if you ask the same question of a worker in Germany, he is likely to say he is a machinist. Germans identify very strongly with their skill, trade or occupation, which they are likely to pursue for their whole working life. Under German law, one cannot open a business in a trade or craft that is not licensed and unless one is a certified master in that trade or craft. One can only become a master after having first apprenticed in that trade and served as a journeyman. To proceed from apprentice to journeyman, and then from journeyman to master, one must pass written and practical examinations to receive the necessary certificate, the criteria for which are the same throughout the nation. It can take as long as ten years to change these criteria for any given trade or craft.

The advantage of the Japanese system is substantial. It is very much better adapted to a world in which technologies and consumer tastes are changing ever more swiftly. When workers identify with their firm and are willing to develop new skills and change their occupations whenever that is necessary to keep the firm competitive, both firm and worker are likely to be constantly on the leading edge of change. A nation that, from the education and skills point of view, puts the greatest priority on capacity and willingness to learn is the one that is most likely to succeed in a world that will favor organizations that are constantly learning.

So, why not adopt the Japanese system? Because the lack of skill standards in the Japanese system works only because employees in the big firms are there for life. That would not work in the United States. Our society is among the most mobile in the world.

The need for standards that go beyond the firm arises in mobile societies. In Japan, people work hard at learning because the most desirable employers provide substantial rewards for that behavior. In a mobile society, individuals are less likely to invest heavily in skill development unless they are sure that the skills they develop will be honored by many employers — ideally, all the employers in the nation that require that set of skills.

Incentives, standards and skill development

Issues of incentives are at the heart of this argument. As matters stand now, only the selective colleges require more than a high school diploma. So the vast majority of high school students, including almost everyone who will go into the front line work force, have no incentive to do any more than the minimum necessary to get the diploma, which is very little at all. And then young people and adult workers have no great incentive to invest heavily in continued skill development, because they have no way of knowing whether the training they are investing in is what a future employer will be willing to pay for. All of this is in sharp contrast to our competitors, who provide very tangible rewards to young people who work hard in school, and who are able to assure people of all ages that when they invest in their further skill development, that investment will pay off, because the training they have invested in is valued by the employers they want to go to work for.

These incentive systems turn on standards. Clear standards make it clear what competencies will be valued and therefore what one must learn how to do. Clear standards provide a reliable way for employers to recognize accomplishment, which makes it possible for them to reward it.

A three-tiered system of skill standards

So the question now is, how can the United States get as much of the benefit of the Japanese system as possible while still adopting some form of formal, universal skill standards? The

answer, in our view, is a three-tiered system of standards. The first tier will be provided by the National Education Standards and Improvement Council. The Council is meant to develop the kind of standard that is represented by the Japanese expectation for graduating secondary school students — a universal expectation of high academic mastery, combined with a demonstrated capacity to learn. I hope it adds to that a demonstrated capacity to apply what one has learned to complex, real-world problems.

The second tier would consist of a system of professional and technical certificate standards that would cover a very broad range of manufacturing and service occupations not requiring a baccalaureate degree. It would serve, among other things, as the linchpin of a first-class school-to-work transition system.

Assume for the moment that students who have met the standards established by the National Council are entitled to decide for themselves whether they wish to go directly into the work force, enroll in a college-preparatory program ('college' here meaning a baccalaureate degree program) or enroll in a program of technical training and further education leading to a college degree or certificate below the baccalaureate degree.

Many, perhaps most, will choose to enter programs leading to these professional and technical certificates and degrees. These programs would be two to three years in length. They would consist of part academics offered by an educational institution and part structured training, offered by an employer. The requirements for getting these certificates and degrees would be spelled out mainly by national groups of employers, so that students who completed such a program would find that the certificate they received was honored from coast to coast when they were looking for a job. But all of these professional and technical certificate and degree programs would be so designed that the student who completed one was part way down the road to a baccalaureate degree; there would be no dead ends in this program.

I believe there should be no more than 20 professional and technical degree and certificate programs, each one designed to provide the skills to perform at the entry level at a high level of competence, for a whole cluster of related occupations. One would certify, for example, the field of precision manufacturing, not numerically-controlled milling machine operator.

Many employers, perhaps most, would require only a professional and technical certificate to qualify for an entry level job in the firm. But others might require a modest amount of additional training to qualify the candidate for a particular occupation in the firm, tailored to the firm's own requirements. In some cases, that might be because of the technical requirements of the particular job or occupation. In others, it might have to do with the requirements of a particular piece of machinery. In still others, it might have to do with an employer's need to provide training in the particular way that firm does business and with the values of that employer.

It is this additional training for specialties and for employer values that would constitute the third tier of standards. In some cases, these standards might be truly national, as when they are adopted by an employer's group, a labor union, or a professional or technical association. In others, they might be adopted only by one firm (Japanese-style) or by a group of firms related by supplier relationships.

A skill certification system of this sort will make it possible for young people to prepare themselves for a wide range of occupations at a high level of entry level competence, give them the skill base required to move with a minimum of retraining among a wide variety of related occupations, and assure them that the effort they put into this training will pay off because the certificates will be portable across the whole nation and the criteria will be embraced by the employers themselves. It has much of the flexibility of the Japanese system while still retaining the worker mobility advantages of the German system.

Standards for everyone

Standard systems are like telephone systems. A telephone company that has only four customers can offer far less to its customers than one that can offer connections to 40 million customers. I have spoken so far as if the purpose of the professional and technical standards system was solely to guide the development of professional and technical skills among young people just entering the work force. But the true power of such a system lies in its potential for tying together into one system what are now many disparate and often non-functional systems. The same standards that are used to guide the initial skill development of young people can be used to guide the skill development of full-time homemakers returning to the work force, dislocated

workers seeking another career with high potential, disadvantaged workers who have mastered the basic skills but want the technical skills required to make a good living — in fact, anyone of any age, sex or race who wants to get ahead. If we had one set of standards to do all this, it would be worth while for many education and training organizations to develop the program capacity needed to bring lots of people up to these standards. Right now, poor people who participate in federal job training programs are stigmatized and have a hard time getting a good job. But if these people met a performance standard that everyone else is expected to meet, then it would not matter where they had received their training, but only that they had met a clear standard that was recognized by employers everywhere. This could make a very big difference for the people enrolled in government-funded job training programs.

Standards for performance-based systems

Once these standards are in place, and organizations and institutions new and old start coming up with programs for people who want to reach them, then something else becomes possible — the development of modes of government funding for training that are based on results rather than inputs — How many of the people who entered the program actually reached the standards? How long did it take them? How much did it cost? With common training standards in place, it becomes possible to have common measures, and common measures make it possible to establish public policies that will reward service providers who actually produce for their clients.

But the idea of having a national board for skill standards is not without controversy. The administration's proposal has raised some important questions. I would like to mention a few and quickly summarize my views on those issues.

The bill provides great latitude to the Board in organizing the standard-setting process. If everyone is in agreement that standard-setting should be industry-based, shouldn't the legislation require the Board to establish industry-based committees that will in turn develop the standards for their industries?

Some people have urged that the legislation be changed to specifically require the Board to establish industry committees. I do not think that is wise, and I will explain why.

There is, of course, a great advantage in organizing by industry: The industry groups concerned will feel some ownership of the standards they create and are therefore much more likely to use them. But there is more to it than that.

Last year, the Departments of Labor and Education gave awards to a number of industry organizations that came forward with proposals to develop industry skill standards. Among them was the American Electronics Association, from whom you are hearing today. Each proceeded, as asked, to develop standards without reference to the way in which the others were proceeding. This is a very good way to explore the territory and to develop some experience from which the country will profit enormously. But it is no way to build a national system of standards.

When school teachers cross state lines in this country, they typically have to take a whole lot of courses in the new state that look suspiciously like courses they had to take in the old state, because the two states have not agreed on a common standard for teacher licensure. They often choose to leave teaching altogether rather than endure the tedium and the expense. Suppose, in addition to electronics, a group had come forward to develop standards for the automobile industry. When an automobile mechanic opens the hood these days, she stares down at a maze of electronic equipment. If the auto industry should experience a big downturn, would we not want people who had learned a lot of electronics skills in the automobile manufacturing business to be able to transfer easily into consumer electronics or industrial electronics, if things were booming there? There would be enormous advantages in having standards that embraced not just industry groups, but skill groups that cut across industry groups.

Then there is the question of what an 'industry' is for the purposes of standard-setting. The American Electronics Association in fact encompasses many different industries, ranging from marine electronics to consumer electronics to the computing and semiconductor industries, and a whole host of occupations as defined by the dictionary of occupational titles. Many of these industries have their own associations. Electronics as a group falls under manufacturing, which has its own association. The AEA is not even alone in representing electronics taken as a whole. There is also, for example, the Electronic Industries Association. Some people have expressed strong reservations about giving as much latitude to the National Skill Standards Board as the bill does and have recommended specifying in the legislation that the Board organizes the

standards by industry or by groups of industries, and then delegates to those industries the actual setting of standards. But, as I have just pointed out, this is much easier to say than to do. Someone would still have to define what is an industry, making a map of all industries that had everything colored in, with not more than one color on one spot. Even after the Board had done this, and thrown away the possibility of organizing by skill groups when it did so, it would not be at all obvious which industry organization or organizations should be given the standard-setting job.

In my view, the Congress should not try to second guess the best answers to the issues I have just raised. The nation would be best served if the Board were left free to figure out for itself what the 'map' of standards should look like, taking into account the experience of other nations, the work of the pilot projects, and the views of all the actors who will have to make the new system work. They will have to establish a balance between the views of industry leaders who will want standards molded to the needs of their industry and of workers, who will want to have the option of moving easily across industries. They will surely want to fully involve the existing industry groups and associations in their work, but the Board should not be put in a position in which it feels compelled to give the standard-setting process away to any single organization that represents only one faction in an industry, or necessarily to give equal play to many organizations. Some industry associations — the AEA is an excellent example — will leap to the challenge and do first rate work. But many will not. Some associations will create standards that are forward looking and internationally competitive. Others will freeze into concrete standards that will condemn this country to competing on wages, a competition we can only lose. What is important is that the Congress makes its goals as clear as possible, provide the Board the latitude to figure out how to get there and then hold it accountable for its decisions. I would not tell it how to organize.

The pilot projects are well underway. Weren't they supposed to provide the data that would help us figure out how to establish a system of skills standards? Shouldn't we wait until their work is done, two years from now, before we create this Board?

No. The organizations involved in these pilot projects do not see themselves as engaged in a research project — they are building standards they actually plan to use in their industries. And it is beginning to bother some of them a lot that what they are doing does not fit together.

They know that that means that someone will have to come along to create a structure into which they will have to fit. If I were them, I would far rather have the option of working now with a Board whose job it was to design the system, so that the standards I was developing could be designed to fit into that system from day one than to be told two years from now that everything I had done was provisional and that a new Board was about to put into place a system that was almost certain to invalidate much of the work that I had done.

It is very important that the new Board pays attention to what is being learned by the pilot projects, but that does not require that it not be created for another two years.

The standards that the National Skill Standards Board will put into place will create yet another set of hurdles barring the way to good jobs for disadvantaged kids and workers. Shouldn't the Congress prevent anyone from using these standards for initial hiring and promotion until everyone has an equal opportunity to learn the material that must be mastered in order to meet the standards?

Employers use all kinds of standards and tests now to help them make the decision on who to hire. No employer would be required to use the new Board standards. It seems strange to say they should be prohibited from using these standards but can use any others they wish. The pertinent law here is Title VII and the related case law flowing from *Griggs vs. Duke Power*, which basically says no test can be administered for hiring purposes that has differential impact by race and cannot be shown to measure skills or knowledge that are actually required to successfully perform the job for which the person has applied. The bill now makes it explicit that it does not override any of this law, all of which remains in force. Thus *Griggs* and Title VII would apply to the standards and tests emerging from this Board in the same way that they would apply to any others. That being so, I can see no reason for denying employers the right to use the standards and tests developed by this Board for hiring purposes, assuming that they meet these basic civil rights criteria.

Which raises the larger question as to whether it is fair to put standards into place when some people will find it easier to meet these standards than others because they have had access to more and better preparation. But that is true now. The proportion of people who come from minority and low income backgrounds who take and pass the examinations that lead to advanced

degrees in mathematics, engineering and the sciences is appallingly low, as is the proportion of those who take the medical boards or the nursing examinations. The reasons that is so, though complex, are clearly related to unequal opportunities to acquire the necessary prerequisite knowledge. But the society does not therefore prohibit the use of those standards and examinations. If it did so, employers would find some other way to make the decision about who to hire and the ways that they chose would undoubtedly be more subjective and more subject to racial bias than the ones now in place. This is not going to be an easy dilemma to resolve.

In any case, we should not lose sight of the fact that the new skills standards can be a powerful asset for disadvantaged Americans. Standards can open doors to people who can show that they can demonstrate the required competence. And the new job training standards will be a powerful tool for improving the quality of federal job training programs.

Why limit the number of standards to 20? Why not have a standard for every occupation, or at least for every industry?

The first answer to that question is the one I gave earlier when discussing the German-Japanese dimension line of thinking about skill standards: The more standards there are, the more rigid the economy that uses them. It takes a long time to change them and people tend to identify with the specific occupation for which they have been certified, so they will fight changing them. The society that has a more flexible system will be able to respond faster to changes in technology and consumer taste. That is why all the European countries have been busy slashing the number of standards they use.

But there is another, and very important, reason. When the Commission on the Skills of the American Workforce examined these issues in 1989 and 1990, it discovered that the advanced industrial countries experiencing the best growth rates in real wages and productivity were competing on quality, not cost. They knew that countries with low wage structures would inevitably dominate the markets for mass produced goods. But competing on quality, customization and responsiveness requires a different form of work organization than does mass production.

Competing on quality means abandoning the mass production method of organizing work in favor

of high performance work organization. The Commission found that, in assembly plants, the workers had been organized into self-managing teams that took responsibility for scheduling their own production, parts ordering and inventory, equipment maintenance and quality control. In banks, the Commission found that ordinary bank tellers had been trained to understand and sell the full range of modern sophisticated bank products to their customers, from zero coupon bonds to variable rate mortgages. Insurance companies had given their field agents powerful portable computers loaded with custom software that enabled them, on the spot, to give their customers quotes that used to take a week to get to them. The back-office staff who used to grind out the numbers for these quotes had been retrained to do sophisticated custom quotes for products on which the company could make a much higher profit.

In each of these cases, the front-line staff had been given duties and responsibilities that, in this country, are rarely assigned to anyone but professionals and managers. By empowering these front-line workers, the management had made it possible to cut out many intermediate layers of management and supervision, and many specialized departments whose services were no longer needed. Because there were many fewer departments, there were many fewer steps involved in producing goods or services involved.

In addition to the money saved, miscommunications among all these organizational units could be eliminated, mistakes could be avoided and much time saved. Quality went way up, because wastage could be avoided at the point at which it first occurred, rather than waiting until it piled up at the end of the line.

These firms could respond much more quickly to changes in consumer taste because the long lead times required in conventional mass production were no longer needed. The people who actually worked on the line could make constant improvements in the product or service without waiting for the beginning of a whole new design and manufacturing cycle, which often takes years for a complex product.

For all these reasons, high performance work organization holds the key to a high productivity, high wage economy. By employing its disciplines, a company — or a whole country — can achieve the levels of quality, customization and responsiveness to changes in consumer taste that are required to establish and maintain wage levels above those that can be sustained with

standard mass production methods. Only in this way, in other words, is it possible to produce the goods and services for which people around the world are prepared to pay premium prices. If a nation can organize its economy on these principles, it can not only enjoy high wages, but it can also ensure high levels of employment and good income distribution.

But high performance work organization requires team organization and requires that the members of the team be able to do each other's jobs. It also requires that each member be able to take on a wide range of functions that are rather broadly defined. Underneath it all, it is predicated on the idea that the front-line worker is a professional. Doctors get a single basic credential, as do lawyers. One is expected to specialize, but also to know the basics of all the jobs in the whole broad field, and to be able to move to another speciality within that broad field with some facility. If our economy is to survive and prosper in this intensely competitive international environment, it will be in part because the average front-line American worker is not a cog in a machine but rather an autonomous, contributing problem-solver, constantly learning, constantly looking for the next challenge. This — not the world of narrow occupational standards — is the world that the new standards should be designed for.

Chairman KILDEE. I want to go back to questions on this whole idea of one system because we are getting that from you and others and particularly from Secretary Reich. So I want to go back—there is a question—see what clarification we can get on that.

Ms. Piesert.

Ms. PIESERT. Thank you.

I am Margaret Piesert. I am Director of the Health Care Workforce Project with the Service Employees International Union. Our union represents more than 1 million service sector workers in the United States, Canada and Puerto Rico. We are the fourth largest union in the AFL-CIO and the largest union of health care workers in North America.

I am pleased to be able to testify today in support of establishing a National Skill Standards Board and, more broadly, to stress the urgent need for training and skill standards in order to foster high productivity work organization in the United States, to build a secure and prosperous workforce and to keep our Nation competitive in the global economy.

As the United States has witnessed the transition to a service economy, we have also witnessed a retention of outmoded methods of production, management and work organization based on the Taylor model. This system was developed to serve mass production by relying on an elite few to plan work and to organize work. Little training was provided for frontline workers and little was expected of them.

Now the revolutions in high technology and electronic communication have brought demands for greater skills from our workforce, even in traditionally low wage and service occupations. But while the productivity imperative remains, we really aren't responding to change by providing workers with the skills they need, either in school or on the job.

In the best examples from the modern industrial sector, we have seen such problems addressed. Apprenticeships and training programs have a long and successful history in American industry, but we have seen almost nothing like it in the service sector where the largest number of employees are in need.

I would like to share with you SEIU's experiences in the health care industry. Health workers are going to have to improve their skills as the industry continues to restructure, and a strategy for upgrading skills will be needed if workers are to be able to participate in the new types of health care delivery systems and work organizations. Skill standards, continuous training and effective career development tracks will result in a more flexible and a more productive health care workforce.

My union is participating in two experimental skill standards programs in the health care industry. Both are aimed at setting uniform standards for health science and technology jobs, and both are funded by grants from the Department of Education.

One project is being carried out by the Far West Laboratory for Educational Research and Development, and that project is going to develop standards for a number of entry-level service occupations in the health care industry, nurse aides, home health aides and other support service jobs.

The other is being conducted under the auspices of the Education Development Center, Incorporated. In its initial stages, this one will set standards for entry-level workers in the bioscience industry and labs and in research. This—in its early stages, this project is undertaking an extensive analysis of the jobs in the industry, the skill content of the jobs. They are doing focus groups with workers, extensive interviews with frontline workers and getting a great deal of input from the workforce itself.

In addition to these projects, our union has a long history of negotiating career ladder programs for service workers in hospitals. Our local unions have developed, for example, a much-cited worker education program at nine hospitals in Massachusetts. The program initially concentrated on moving entry-level workers to mid-level clerical jobs, lab jobs and maintenance positions, and has since expanded to permit career movement into higher-level technical and professional positions.

The Career Ladder program at Cape Cod Hospital in Massachusetts, which has been in existence for more than 10 years, helps to facilitate more than 50 promotions every year, and the hospital now does all of its—fills all of its vacancies through internal promotions.

In addition, our experience with labor-management cooperation tells us that national skill standards will be vital to the future of both employees and employers in this industry. We see young workers coming in that, often, lack the skills to rise above an entry-level position. The mechanisms to promote skills development and certification just don't exist. There is a great deal of frustration. Turnover levels are very high.

In the health care field, this cycle of frustration is reinforced by rapidly changing technology which is making health care work much more complex. In addition, our health care workforce includes an ever-growing number of recent immigrants and non-native speakers of English. Yet in many health care jobs and in all settings there is more emphasis on computer skills and workers at all levels need to have higher skills, use computers. This goes, you know, down to central supply clerks, housekeepers in hospitals. There are higher competency requirements.

Without skill standards and training, the result for many workers coming into the health care field now is they end up in a job ghetto. There is no hope for advancement, no mobility and no escape. Even where individual facilities do offer training to employees, the content is often very employer specific and cannot be applied elsewhere when the worker changes jobs.

Our experience also tells us, though, that we need to develop skill standards carefully. Labor unions and, more important, frontline workers must be fairly represented in the development process. In fields like health care, our workers know better than anyone how countless matters of work organization can be improved. Frontline workers are the key to quality in the workplace, and they will be an invaluable resource as we undertake the mission of developing skill standards.

Thank you very much.

Chairman KILDEE. Thank you very much.

[The prepared statement of Ms. Peisert follows:]

STATEMENT OF MARGARET PIESERT, DIRECTOR, HEALTHCARE WORKFORCE PROJECT,
SERVICE EMPLOYEES INTERNATIONAL UNION

I'm Margaret Piesert, Health Care Workforce Project Director of the Service Employees International Union.

SEIU represents more than 1 million service-sector workers in the United States, Canada and Puerto Rico. We are the fourth largest union in the AFL-CIO, and the largest union of healthcare workers in North America.

I'm pleased to be able to testify today in support of establishing a National Skill Standards Board and, more broadly, to stress the urgent need for training and skill standards in order to foster high-productivity work organization in the United States to build a secure and prosperous workforce and to keep our Nation competitive in the global economy.

As the United States has witnessed the transition to a service economy we have also witnessed the retention of outmoded methods of production, management and work organization based on the "Taylor" model. This system was developed to serve mass production by relying on an elite few to organize work. Little training was provided to frontline workers and little was expected of them.

Now, the revolutions in high technology and electronic communication have brought demands for greater skills from our workforce—even in traditionally low-wage occupations. But while the productivity imperative remains, we aren't responding to change by providing workers with the skills they need—either in school or on the job.

In the best examples from the modern industrial sector, we have seen such problems addressed. Apprenticeships and training programs have a long and successful history in American industry.

But we've seen almost nothing like it in the service sector, where the largest number of employees are in need.

I would like to share SEIU's experiences in the healthcare industry.

Healthcare workers will have to improve their skills as the industry continues to restructure and a strategy for upgrading skills will be needed if workers are to participate in types of health delivery systems and work organizations. Skills standards, continuous training, and effective career development tracks will result in a more flexible and productive healthcare workforce.

My union is participating in two experimental skills standards programs in the healthcare industry: Both are aimed at setting uniform standards for health science and technology jobs, and both are funded by grants from the Department of Education.

One is being carried out by the Far West Laboratory for Educational Research and Development. It will develop standards for a number of entry-level service occupations, including nurse aides, orderlies, and other support service jobs.

The other is being conducted under the auspices of the Education Development Center, Inc. In its initial stages, this project is undertaking an extensive analysis of the skills content of jobs, including focus groups and interviews with frontline workers.

In addition, SEIU has negotiated career ladder programs for service workers. SEIU locals, for example, have developed a much-cited Worker Education Program at nine hospitals in Massachusetts. Grants to set up these programs came from a special training fund established as part of the State's universal health plan. The program initially concentrated on moving entry-level workers to mid-level clerical, laboratory and maintenance positions and has since expanded to enable moves into higher-level technical and professional positions.

The Career Ladder program at Cape Cod Hospital, which has been in existence for more than 10 years, helps facilitate more than 50 promotions per year.

And our experience with labor-management cooperation tells us that national skill standards will be vital to the future of both employees and employers in this industry.

Only by fostering high-wage jobs and providing workers with advanced skills that are portable can American healthcare providers meet the standards of quality and cost-effectiveness they are seeking.

In this industry, young workers often lack the skills to rise above an entry-level occupation. The mechanisms to promote skills development and certification just don't exist. As a result, frustration and turnovers are high.

But leaving the job doesn't benefit the typical service-sector worker. Rather, employees are held in low-end jobs by their lack of skills, and their careers are more likely to reflect movement from one low-wage, entry-level job to another without upward mobility.

In the health care field, this cycle of frustration is reinforced by rapidly changing technology and improved infection control procedures which make work especially complex.

In addition, our healthcare workforce includes an ever-growing number of recent immigrants and non-native speakers of English. However, in many healthcare work settings, computer skills are now expected even of housekeepers and supply clerks.

The result is a job ghetto—no mobility, no escape.

And even where individual facilities do offer training to employees, the content is often too employer-specific, and can't be applied elsewhere in the event of job dislocation.

But our experience also tells us that we need to develop skills standards carefully. Labor unions, and more important, frontline workers, must be fairly represented in the development process. In fields like healthcare, our workers know better than anyone how countless matters of work organization can be improved.

Frontline workers are the key to quality in the workplace, and they will be an invaluable resource as we undertake the mission of developing skills standards.

Thank you very much.

Chairman KILDEE. Mr. Valdes-Pages.

Mr. VALDES-PAGES. Thank you.

Good morning, Mr. Chairman, distinguished members of this committee. I want to thank you for the opportunity to share some of our experiences implementing skill standards at our college.

I represent a 1,300-student technical college which offers 2-year associate and 4-year baccalaureate degrees in technical and health care fields. We have been in operation since 1945. I am also an active member of the Career College Association.

In 1989, we made the decision to adopt skill standards and competency exams as a requirement for graduation. The reasons we did this are many. I will list some of the following.

This country is, for the first time, focusing on the need of first-rate frontline workers. Education in this country, including career education, often performs in a vacuum which makes it difficult to measure performance and thereby separate yourself from your competition, public or private. Colleges of all sizes often find themselves limited in the manner that they can stay in touch with the real world. What we teach is sometimes dictated more by what we know or what we want to know than by what our employers need.

We saw at our college an opportunity to forge a partnership with our employers which would allow us to become more measurable and accountable, thereby enhancing the value of our graduates. Being driven by employer needs, we can also better serve our other consumer, the student, by assuring them of a relevant and industry-standard education.

The standards we adopted were dictated by our employers. And let me be clear that in the driving force of this process is the ability to sustain an employer focus through standards. Allowing employers to dictate what we teach enhances the mouth of the funnel by which we feed relevancy to our curriculum.

The process we used is very similar to what is used in industry in product development. In a typical product development model, the first stage is to identify consumer needs through existing product research. In our educational setting we asked employers to provide us with that input.

In product development, consumers would describe how a new product would solve problems. In our setting, employers described skill sets.

In product development, you develop a product according to the specifications of your consumer. In our setting, we train our students in accordance with the input of the employer.

In product development, you establish a quality-control process to assure the finished product meets the design specifications. In our setting, we provide competency testing as our quality control.

In product development, you then send the product to market, often with a guarantee of performance. You then research consumer satisfaction to further refine your product. In our setting, we issue a skills guarantee to employers and further research satisfaction with our graduates so that we can further refine our product and continue the cycle.

I would like to share with you some brief comments from some of the employers and advisory board members that sit in our advisory board and have helped us evolve this process.

Jane Hill from Martin Marietta: "The American educational system is carrying the stigma of low-skill competency of its students. Rightly or wrongly, the perception is there and must be addressed. The competency-based education and testing is an excellent method to demonstrate to your customers, both students and the hiring employers, that you are serious about graduating skilled, thinking adults."

Don Marchese, Xerox Corporation: "By establishing a testing process to validate the actual skills possessed by your graduates at the time they would be entering the job market, you are providing a valuable service to both your opportunities and their future employers."

Steve Lindley, Federal Express: "I have been extremely impressed on the speed in which DTC has incorporated many possible changes in the CIS program. Their graduates are given the opportunity to be better prepared for careers in this technology driven industry."

Susan Bobka, Humana Hospital: "Competency exams will help employers develop realistic expectations for the graduates. The test will represent a standard of quality for the school."

In the interest of time, I will submit the rest of my comments to the record and conclude with these thoughts.

Our standards are not hypothetical. They exist, have been working now for 4 years. They are useful to both students and employers. They are not perfect, but there is a substantial improvement over not having them and operating in worlds of opinion.

Tests are always a point of contention. However, competency exams, particularly if they mirror industry evaluations, are an effective tool. They are dynamic and require continuous attention and improvement.

We have our 150 advisory board members meeting quarterly to reevaluate our standards. They are not designed to prevent people from succeeding. Rather, they are designed so that when graduates achieve certain levels of performance they know it and can be confident. They are meaningful if determined by employers. Without industry participation, skill standards would just become another opinion.

Skill standards, in my opinion, bring about a clear focus and high expectations, two of the traits normally identified in the re-

search on high-performance schools. We have observed this sharing of high expectations not only among our students and faculty but also among our employers and advisory board members.

Setting high goals and expectations helps students achieve. I would like to thank this committee for its attention, and I will entertain any questions. Thank you.

Chairman KILDEE. Thank you very much.

[The prepared statement of Mr. Valdes-Pages follows:]

Mr. Chairman and distinguished members of this committee,

I want to thank you for the opportunity to share some thoughts regarding skill standards and some of our experiences implementing them. Specifically, I will address the following:

- 1) The reasons we adopted standards;
- 2) A brief review of the process; and
- 3) Future directions as we see them.

BACKGROUND INFORMATION: Firstly, in the form of background, let me give you some information on the College I represent. Denver Technical College is a 1,300 student technical college situated on two campuses in Denver and Colorado Springs, Colorado. We offer two-year Associate and four-year Baccalaureate programs in Technical and Health Care fields such as Computer Sciences, Electronics, Computer Aided Drafting, Physical Therapy Assisting, etc. The college has been operating since 1945.

RATIONALE FOR ADOPTING SKILL STANDARDS: In 1989, we made a very major change in the process by which we train students when we decided to adopt skill standards and competency exams as a requirement for graduation. The reasons for making this choice are many. They include the following:

1) This country is, for the first time, focusing on the need for first rate front line workers. As an observer at one of our recent Advisory Board meetings wrote recently, "this country is going to focus more on technology than science, and more on front-line workers at technical colleges than MBA/PHD's at national universities. We cannot run away from this trend." This observer, incidentally, is the Director of International Relations for Japan's Institute for Future Technologies, Mr. Tom Kato. In any case, if this trend is true, how we train these front line workers required rethinking and perhaps reforming.

2) Education in this country, including career education, often performs in a vacuum which makes it difficult to measure performance and thereby separate yourself from the competition, public or private. Accreditation is not by itself a guarantor of quality and no suitable alternatives have surfaced to demonstrate the accountability that increasingly more limited resources and increasingly more competitive marketplaces, which are now international, require.

3) Colleges of all sizes often find themselves limited in the manner that they can stay in touch with the "real world". Indeed many do not. What we teach is sometimes dictated more by what we know, or want to know, than by what employers want. This often leads to a disjoining of the

educational process from the workplace needs.

4) We saw at our college an opportunity to forge a partnership with our employers which would allow us to become more measurable and accountable, thereby enhancing the value of our product - the graduate.

5) Being driven by employer needs, we can also better serve our other consumer, the student, by assuring them of a relevant and industry-standard education.

6) The standards we adopted were dictated to us by our employers. Let me be clear in that the driving force of this process is the ability to sustain an employer focus through standards. If standards were developed without employers, the process would lose much of its worth.

7) Allowing employers to dictate what we teach enhances the mouth of the funnel by which we feed relevancy to our curriculum.

SKILL STANDARD DEVELOPMENT PROCESS: I would like to now describe the process by which we implemented competency at our college. We actually started testing students for competency in our medical programs approximately seven years ago. Competency testing is more common in health care than in technical fields. The rationale is simple. You want students to be able to demonstrate what they have learned prior to going to work on patients. In any case, our success with placement of students, at times we have had employers exceeding graduates, led us to expand the process to all programs.

In the fall of 1989, we accumulated information from national organizations that were working on skill standards. We used that information to develop questionnaires to send to employers separating skills into three major groups:

- a) Job Specific skills
- b) Reasoning skills
- c) Personality skills

Our initial focus has been on job specific skills, since they are easier to quantify and measure. That being said, the other two groups could not be ignored, for they were every bit as important to employers. However, because of the limited amount of time we have with students at the post-secondary level, we found it necessary to level the academic quality of the entering student by increasing the entrance requirements to the college. Core classes in math and English had to be enhanced and an interview process was begun for programs in which personality traits were considered critical. Classes to enhance these personality traits into customer relations skills were developed and implemented.

Advisory boards were expanded in size and scope - 150 individuals representing 130 employers in Colorado, from national and international companies, meet quarterly. Their initial focus was to define skills required of graduates and tests to measure those skills. Students would no longer be able to graduate without passing this exam. The advisory groups would eventually take control of all curriculum development recommendations as well as equipment needs.

In June of 1991, we announced the Skills Guarantee Program. In this program, we issue a written guarantee to employers that if graduates who have passed our competency exam do not have the skills we say they have, we will reimburse the first month's salary. I am proud to say

that after two years we have not had a claim from this program. However, and perhaps this speaks to the real value of our program, approximately 10% to 15% of the students who took the competency exam failed them the first time and had to enhance specific skills through tutoring or class retakes. In previous years, these graduates would have gone out into the workforce, side by side, with our other graduates, diluting their value and worth. It is clear that, even with a curriculum driven by the needs of industry, there are some students who are unable to completely apply the knowledge in the workplace. If you extrapolate these numbers into the universe of national front line worker training, and factor in reasoning and personality issues, we begin to get a grasp for the magnitude of the problem. Failure to establish skill standards and test student skills against those standards results in a workforce with varying skills, which therefore forces the employers to evaluate, test and retrain workers in order to meet their specific needs. It is our belief that the college's testing, evaluating, tutoring and extra work on skill development, for students with some skill deficiencies, has improved the quality and consistency of our graduates and therefore reduced the need for unnecessary industry retraining.

Before going any further, let me state that this process is no different than the model used by companies which manufacture and market successful products. Let us look at the similarities.

MARKET RESEARCH/EMPLOYER SURVEYS: In a product development model, the first stage is to identify consumer needs with the existing product through research. In our educational setting, we ask employers to provide us with that input.

CONSUMER/EMPLOYER REQUIREMENTS: In product development, consumers would describe how a new product would solve problems. In our setting, employers describe skill sets.

PRODUCT SPECIFICATIONS/GRADUATE SKILLS: In product development, you develop a product according to the specifications of your consumer. In our setting, we train our students in accordance with the input of the employer.

QUALITY CONTROL/COMPETENCY TESTING: In product development, you establish a quality control process to assure the finished product meets the design specifications. In our setting, we provide competency testing as our quality control.

PRODUCT/SKILLS GUARANTEES: In product development, you then send the product to market, often with a guarantee of performance. You then research consumer satisfaction to further refine your product. In our setting, we issue a skills guarantee to employers and further research satisfaction with our graduates so that we can further refine our product and continue the cycle.

Now, how are we different? Don't most people have advisory boards? The reality is that, in most institutions, faculty and not employers dictate curriculum. They may or may not be the same. In our setting, curriculum changes can only be made through advisory boards which meet quarterly. Curriculum development and graduate placement are under the same manager, in order to maximize industry input. Since all graduates have to now pass competency exams, student focus is changing toward the acquisition of skills as opposed to grades. Incidentally, as of Fall of 1992, the specific program outcomes have now been identified, class by class. Instructors now not only give a grade but have to certify that a student has acquired all the skills from each specific class.

Below are some excerpts from letters from advisory board members and employers relating why they feel this process is important. The full text accompanies this presentation.

"The American educational system is carrying the stigma of low skill competency of its students. Rightly or wrongly, the perception is there and must be addressed. The competency based education and testing is an excellent method to demonstrate to your customers, both students and the hiring employers, that you are serious about graduating skilled, thinking adults."

Jane Hill, Martin Marietta.

"By establishing a testing process to validate the actual skills possessed by your graduates at the time they would be entering the job market, you are providing a valuable service to both your students and their future employers."

Don Marchese, Xerox Corp.

"I have been extremely impressed on the speed in which DTC has incorporated many positive changes into the CIS program. Their graduates are given the opportunity to be better prepared for careers in this technology driven industry."

Steve Lindley, Federal Express

"As most employers will agree, our educational institutions and business communities have operated mutually exclusive from one another. However, the world is changing, and at breakneck speed. The relationship between our educators and employers must synchronize in order to provide the talent and skills required to compete in this changing environment."

Philip Wentzel, Petroleum Information

"I am in favor of the approach DTC is taking towards competency based education. It is unique and will help students and employers have confidence in their education."

Carol Gumpert, United Artists

"Employers, such as US West, would benefit from a program that guarantees graduates possess skills relevant to their future positions."

Susannah J. Labondc, US West

"Competency exams will help employers develop realistic expectations for the graduates. The test will represent a standard of quality for the school."

Susan Bobka, Humana Hospital

In order to accomplish all of this, we have had to make some changes in what we call the college "culture". When most of us attended college, our appearance, attendance, punctuality and speech were not of critical importance. Our grades were. Then all of a sudden the aforementioned traits became important. Where do our students learn proper workplace behaviors, if they do not learn this from their parents? One of the things we discovered about our students is that, in spite of good academic skills, many were first generation college students who need help understanding workplace ethics. As a matter of fact, it is important for the college to see itself as part of a continuum, which is a determinant of employment and not an isolated environment. For this to happen, our faculty had to also adopt behaviors that are consistent with industry for these are some of the so-called "soft skills" employers want. Our faculty had to take authorship for admitting, training and placing students in jobs, not just lecturing. Our faculty is available through class room or office hours, forty hours a week, forty eight weeks in the year. They are not tenured, but on a merit system that rewards performance on the basis of both evaluations and outcomes. This has forced a total re-examination on our part of how we delivered education. Our faculty now understands that the mastery of skills throughout the curriculum will determine the students' ability to pass the final competency exam prior to graduation. This results in greater scrutiny of individual skills for every student. Please note that we emphasize that passing or graduating a student who does not have the necessary skills is not doing that student a favor. On the contrary, it often reinforces student

perceptions of failure. Please also note that our process is not geared to "flunk" students, but to ensure that we provide them with the necessary skills prior to graduation.

I would like to give you some examples of changes that we have made as a result of our new relationship with employers. Some would be expected, some are surprising. Indeed there are examples of "technical upgrading" such as adding more programming and math to our electronics programs and the recommendations three years ago to teach C language in a UNIX mini-computer environment recommended by industry. There is a new program about to be implemented, again as a result of advisory board input, dealing with the growing problem of rapidly changing technology out-pacing business' ability to use it. The advisory board has also led the adoption of three generations of hardware and software changes in Computer Aided Drafting in the last five years.

The advisory board has also dealt with continuing the teaching of COBOL at the college, despite the fact that our faculty wanted to discontinue this language four years ago because they felt it was an "old" language. Our employers told us they have tens of millions of dollars invested in this language and they were not going to engage in expensive conversions overnight. Thereby, our entry level programmers need to continue to be trained in Cobol as well as C. They also talked to us about customer relations. Employers have said that all of our collective jobs involve either acquiring customers or keeping the ones we have. Yet colleges don't focus on teaching these skills. We have now developed and implemented a practical course that will help teach customer skills to students in all of our programs.

RESULTS TO DATE: While our program is relatively young, some directional results can be observed:

1. Students in technical fields are receiving higher salaries and seem to be
-

getting hired by more first tier companies.

2. We now refuse some job orders for graduates if salaries are below what we consider acceptable levels.

3. Entrance scores of our students seem to be increasing as a result of students pre-selecting themselves by knowing they have to pass competency exams.

4. Our overall graduate placement rates in the field for which students were trained increased by 23% in the past four years.

FUTURE DIRECTIONS: Insofar as our future work, it is clear this process is ongoing. You don't develop standards once. They require maintenance and updating. As such, our curriculum is reviewed quarterly. We are also just beginning to tackle reasoning and personality skills. We are in the process of developing an individualized learning center where video and software libraries of skills taught at the college are available on one-to-one format so that students don't have to retake entire classes for individual skill deficiencies. We aim to teach more workplace cultures inside the college and we need to find a way to link K-12 standards with post-secondary standards in order to strengthen the continuum of skills.

I believe the issue of skill standards, if approached correctly, and by this I mean in response to specific societal needs, can become a framework by which we re-think education in this country and bring about better linkage not only between post-secondary education and the workplace, but also between k-12 and post-secondary education. These are among the benefits that I see from this linkage:

- 1) The use of k-12 standards for use in admissions to post-secondary institutions.
- 2) The ability to relieve post-secondary institutions from remedial education, which will now presumably be done in k-12, and the utilization of that time to enhance worker skills.
- 3) The utilization of post-secondary skill standards as a framework for transfer of credits among institutions.

To conclude, I would like to leave you with these thoughts.

1. Our standards are not hypothetical. They exist and are working effectively.
2. They are not perfect, but they are a substantial improvement over not having them and operating in worlds of opinion. Tests are always a point of contention. However, competency exams, particularly if they mirror industry evaluations, are an effective tool.
3. They are dynamic and require continuous attention and improvement.
4. They are not designed to prevent people from succeeding, rather they are designed so that when graduates achieve certain levels of performance, they know it and can be confident.
5. They are only meaningful if determined by employers. Without industry

participation, skill standards would just become another opinion.

6) Skill standards bring about a clear focus and high expectations, two of the traits normally identified in the research on high performance schools. We have observed this sharing of high expectations not only among our students and faculty, but also among our employers and advisory board members.

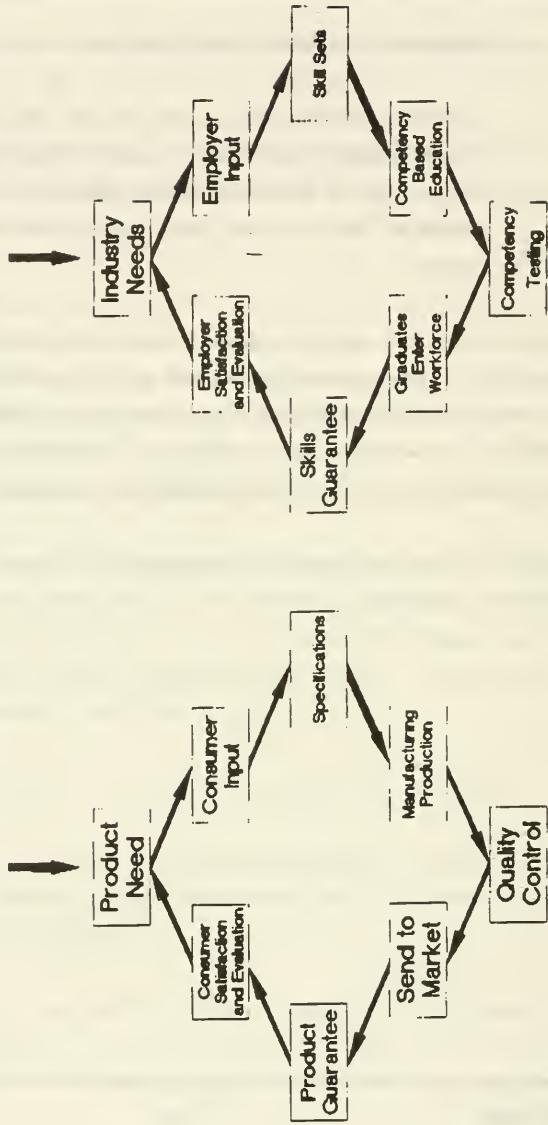
Although focusing our country's educational resources in this direction will indeed cause fear and anxiety, the ultimate potential rewards make the challenge worthwhile. Imagine that at a time where decreased financial resources put a premium on accountability, that employers are satisfied with their workers' skills, our students have learned that their investment of time and money has been well spent, and society is satisfied that its resources have been better utilized.

I would like to thank the committee for its attention and will entertain any questions you may have of me. Thank you.

DENVER TECHNICAL COLLEGE

SKILL STANDARDS DEVELOPMENT PROCESS

PRODUCT DEVELOPMENT = SKILL STANDARDS DEVELOPMENT



DENVER TECHNICAL COLLEGE**SELECTED ADVISORY BOARD MEMBERS****Martin Marietta****Blue Cross/Blue Shield****US WEST****Coors Wellness Center****Norwest Banks****Stone & Webster Engineering****Storage Tech****Ball Communications****Xerox****United Artists Entertainment****Digital Equipment Corp.****Federal Express****NCR****Hewlett-Packard****Honeywell****EDS****Presbyterian/St. Luke's****U.S. Air Force Academy****Humana****Rockwell International**

Chairman KILDEE. Mr. Baroody.

Mr. BAROODY. Thank you, Mr. Chairman.

For America's manufacturers I appreciate the opportunity from you and the rest of the members of the committee to testify on this important legislation.

I think I would be remiss if I didn't offer a general observation at the start—remiss to my members—first, because it is an observation that is important to them and, second, because I think it is directly relevant to the business before this committee. That is, namely, that American manufacturing, despite the powerful myth to the contrary, is in the opposite of decline.

We like to think that American manufacturing is proving once again its ability to compete successfully in an increasingly challenging global marketplace. Our output totals our export levels which have simply doubled in the last 6 years. Our productivity performance, all of these things are powerful evidence of the strong and increasingly strong state of American manufacturing.

Relevant to this committee is the obvious, I think. This manufacturing could not have attained and maintained its current state of strength without a very good workforce. We do not come, therefore, to talk about the important subject of skills as a plea to you to help us rise from our own ashes. The perception is that we are in our ashes. I am here to try to reverse that perception. But, instead, because we think that the focus on skills could importantly be a way of building on the strong foundation manufacturing has helped to establish for itself over the last many years.

As I arrived at the National Association from the Department of Labor a little over 3 years ago, staff there was finding that increasingly our own members were concerned, however, despite what I just said, about the need for skills, the difficulty in finding them. And in surveys that were being conducted at the time I arrived they were finding as well that small and medium manufacturers were reporting that the biggest obstacle many of them often faced to the introduction of new technologies in their own workplace was the uncertainty about the ability of their current workers to present the skills necessary to operate those technologies.

With a sense that we could help our members address and resolve their concerns, the NAM embarked a little more than 2 years ago in direct partnership with the Department of Labor, a partnership which continues in the new administration, in an effort to develop a program which could be directly useful to our own members as they set about to upgrade the skills of their own current workers.

We have discovered that education and training is one of the best investments a company can make in order to stay competitive in today's global economy. And through the partnership with the Department of Labor we are working hard to share this knowledge across all manufacturing sectors.

As part of the project, we have looked for success stories throughout the NAM on how companies have changed the way they work and created new tools to move towards high-performance workplaces. We have asked our members who have had success—and for some of them the success has really been great, dra-

matic—to help those who have not implemented programs of worker training so they can also be the best of the best.

And I have attached to the testimony I have submitted to the committee a description of our program and of our progress so far. We are really quite excited about the potential of this program.

In the last 2 years the National Association of Manufacturers has, I suppose, been in about 15 cities, first conducting research which we conducted both with CEOs and with workers, with workers who were organized and not organized, in focus groups and discussion panels that we held around the country.

And we are trying to apply in our program the lessons that we have learned in that research and in the early efforts to try to turn that research into a successful program that would put CEOs, who, as I said, have mounted successful programs, together with CEOs who understand that they need to but don't really know where to begin so that they may learn from each other. And those who want to mount programs can learn from the trial and error experience of those who have done so.

It is with this in mind that I turn to the skills standards in Title IV of the bill. We applaud your efforts to focus attention on the development of voluntary national occupational skill standards. They can be a common language for jobs and for training, and they can be the building block of jobs.

The old way of looking at training was to look at the number of years it took to attain a skill. We understand now that what is really important is not how long it takes but how well the skill is attained. We know that everybody learns in a different way, some in classic teaching situations, some by reading and some by doing. We must have a system that is flexible enough to get credit for skills learned in a variety of ways, but we all have to agree on a common language of what those skills are.

Skill standards need to be based on jobs broadly defined. We no longer need to have jobs broken down into thousands of subgroups the way that we have done increasingly over the past century. Workers must be able to learn a broad base of skills using skill standards as a guide.

We recognize that in the past the private sector has not systematically arranged, specified or provided adequate occupational skills information for industrywide use for public education and training systems. With increasing competitiveness in the modern workforce, this initiative could begin to fill that need, and we at the National Association of Manufacturers know that a world-class workforce is critical to U.S. economic vitality.

That is why I am here, to commend the process of building partnerships and structures to identify the skills required in a world-class workforce. This effort is timely. The technology and information age has given us new tools and new challenges to make work more productive. Yet the majority of America's workforce, despite excellent strides in the past few years, is designed and our labor force often educated for the mass production segmented work models of the past.

Based in large measure on what we at NAM have learned from our own beginnings, through a partnership with the Department of Labor in a program for our members, I underscore the Associa-

tion's support for this initiative to attempt to design and set national, voluntary industry-based efforts to identify needed employee competencies and skill standards. Such efforts can be the underpinning of the high-performance workplace and are crucial to a world-class workforce.

We do have some concerns, however, about the current language in Title IV. I would like to share them with you and hope the committee can clarify some of these issues and rework the language appropriately so that this measure can receive good and widespread industry support.

And the effort, I would stress, must be industry led. Although others are needed to make this a team effort with other constituencies, a clear signal, we believe, must be sent to business that it is in the forefront of this effort. Without that signal, voluntary standards won't work. As Mr. Tucker suggested, industry will decide it should have stayed in bed.

Industry must use these standards. It must lead in setting them. Without that, a wholly false bottom structure will be created that simply will be ignored. Other countries have faced similar problems and faced failure when voluntary standards are not industry led.

Therefore, we recommend the following for the committee to consider as changes in the language of Title IV:

First, that the chair of the board is described in Title IV as being an industry-based individual, at least for the first term.

That the board itself be composed of a majority of representatives from business and industry trade associations and that workers, both union and nonunion, be included.

We also suggest that one-half of the education component be composed of representatives from community-type colleges.

We propose that the functions of the board be defined so it is clear that its job is only to define the industry clusters and set the criteria and processes for how industry standards should be developed. At no time should the board itself set standards. All activities of the board should be nonbinding and voluntary. All promulgation of standards should come from industry clusters. The board should endorse only that proper criteria and processes have been followed. The board should oversee the process, help keep chaos out of the system, but never mandate.

All certificates of mastery should be issued by the industry clusters in partnership with community colleges.

Any system to periodically revise and update skill standards and assessment and certification systems should be clearly understood and should be industry-led.

A sunset provision we would recommend should be included and that this process require congressional reauthorization in 3 to 5 years. We believe that this is a grand experiment, but it might not work, and if it doesn't it should be ended and something else should be tried.

And, finally, we understand there is amended language on the civil rights section in Title IV. I have looked at it. I am no lawyer. It seems to say that business cannot rely on the skills standard, assessment or certification system in any civil rights proceeding. The reality is that small business will rely on it. This language, as well

as that pertaining to methods for validating the fairness, unnecessarily burdens Title IV, which has as its major focus the development of a voluntary national system of skill standards and certifications.

We believe it is in no one's interest to revisit the many controversial issues debated during the passage of the Civil Rights Act of 1991. The principles of that Act, no more and no less, should be applicable to Title IV to the extent that provisions relating to civil rights issues go further. We believe those provisions should be stricken.

Voluntary skill standards could benefit all U.S. industries and workforces. They could help to change the way we understand work and give U.S. workers great new opportunities. They can encourage more companies, large and small, to create high-performance workplaces, to increase company productivity and enhance the competitiveness of all industry.

At the NAM we are optimistic that the Congress can respond to our concerns and to our hopes, that appropriate industry-led voluntary standards can help us all move to high performance workplaces for the future.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Baroody follows:]

MANUFACTURING HELPS AMERICA GROW

Testimony of

Michael E. Baroody

Senior Vice President for Policy and Communications

National Association of Manufacturers

on H.R.1820

Goals 2000: The Educate America Act of 1993

Before the Subcommittee on Elementary, Secondary, and Vocational Education

of the

Committee on Education and Labor

of the

United States House of Representatives

May 18, 1993



NATIONAL ASSOCIATION OF MANUFACTURERS

1331 PENNSYLVANIA AVENUE, NW, SUITE, 1500 - NORTH TOWER, WASHINGTON, DC 20004-1703, (202) 637-3000

EXECUTIVE SUMMARY

The NAM supports the establishment of voluntary national skills standards. We believe they are the common language for jobs and training: the building blocks of jobs. We no longer need jobs to be broken down into thousands of sub-groups the way they have been for 100 years. Workers need to be able to learn broad-based skills using skill standards as a guide. We believe organizing voluntary industry-based skill standards encourages high-performance workplaces. We believe skill standards would be of particular value to small and medium-sized firms. Benefits to such firms include ready access to benchmarking data, skill analysis tools, and training that reflects industry needs. Employees would also benefit, with skills needed to speed the conversion to high performance work. Such efforts are essential to establishing and maintaining a U.S. workforce that is truly world class.

There are, however, key portions of Title IV of S.846 that need to be improved. We recommend that:

- the chair of the board as described in Title IV be an industry-based individual for the first term.
- the board itself be composed of a majority of representatives from business and industry trade associations and that workers, both union and non-union, be included. We also recommend that one-half of the education component be composed of representatives from community-type colleges.
- the board only identify industry clusters and set the criteria and process for standard setting. All promulgation of

standards must come from industry clusters. The board should only endorse that proper criteria and processes have been followed. The board should oversee the process but **never mandate.**

- all certificates of mastery be issued by the industry clusters in partnership with community colleges.
- any system to "periodically revise and update skill standards and assessment and certification systems" be clearly understood and industry-led.
- a sunset provision be included, that this process require congressional reauthorization in three to five years. This is a grand experiment. If it doesn't work, let's end it and try something else.
- The amended language on the civil-rights section seems to say that businesses cannot rely on a skill standard, assessment or certification system in any civil rights proceeding. The reality is that small business will rely on it. This language, as well as that pertaining to "methods for validating the fairness," unnecessarily burdens Title IV, which is concerned with the development of a voluntary national system of skill standards and certifications.

We believe that these changes will be an important signal to industry that this is a process in which it should fully participate. Without these clear signals and an industry leadership position, it could become a process doomed before it is begun. That would be unfortunate because the opportunities are immense.

TESTIMONY OF MICHAEL E. BAROODY
SENIOR VICE PRESIDENT, POLICY AND COMMUNICATIONS DIVISION
NATIONAL ASSOCIATION OF MANUFACTURERS
BEFORE THE SUBCOMMITTEE ON ELEMENTARY, SECONDARY AND
VOCATIONAL EDUCATION
OF THE COMMITTEE ON EDUCATION AND LABOR
UNITED STATES HOUSE OF REPRESENTATIVES
ON H.R.1820, GOALS 2000: THE EDUCATE AMERICA ACT OF 1993.

Good morning. My name is Michael Baroody, and I am Senior Vice President, Policy and Communications Division for the National Association of Manufacturers. I thank the chairman and members of the committee for the opportunity to present testimony today on Title IV of H.R.1820 -- the skills standards portion of Goals 2000: The Educate America Act of 1993.

Mr. Chairman, I would like to summarize my statement and request that it be placed in the record in its entirety.

Mr. Chairman, we at the NAM, in a special partnership with the Department of Labor, have spent the last two years travelling around the country conducting focus groups with executives and workers. Without question, we have discovered that education and training is one of the best investments a company can make in order to stay competitive in today's global economy. We are working hard to share this knowledge across all manufacturing sectors. As part

of this project, we have looked for "success stories" throughout the NAM on how companies have changed the way they work, and created new tools to move toward high performance. We have asked our members who have had success to help those who have not implemented programs so that they can also be the "best of the best." I have attached to this testimony a description of that program and our progress to date.

It is with this in mind that I turn to the skills standards in Title IV of S.646. We applaud your efforts to focus attention on the development of voluntary national occupational skill standards. Occupational skills standards are a common language for jobs and for training; they are the building blocks of jobs. The old way of looking at training was to look at the number of years it took to attain a skill. We understand now that all that is important is the skill attained. We know that everyone learns in a different way -- some in a classic teaching situation, some by reading and some by doing. We must have a system flexible enough to get credit for skills learned in a variety of ways, but we all have to agree on a common language of what those skills are. That's what skills standards are all about to me. They need to be based on jobs, broadly defined. We no longer need jobs broken down into thousands of sub-groups the way we have done for the past 100 years. Workers must be able to learn a broad base of skills using skill standards as a guide. We recognize that, in the past, the private sector has not systematically arranged, specified or provided adequate

occupational skills information for industrywide use for public education and training systems. With increasing competitiveness in the modern workforce, this initiative could begin to fill that need -- and we at the NAM know that a world-class workforce is critical to U.S. economic vitality in global markets. That's why I'm here to commend this process to build partnerships and structures to identify the skills required in a world-class workforce.

This effort is timely. The technology and information age has given us new tools -- and new challenges -- to make work more productive. Yet the majority of America's workforce -- despite excellent strides in the past few years -- is designed and our labor force educated for the mass-production, segmented-work models of the past.

The world's leading companies, however, are bolstering productivity growth by creating "high-performance work organizations" that focus on continuous improvement of work processes. In such workplaces, highly skilled people use effective training, teamwork, technology and information tools to achieve major strides in product innovation, quality, customer responsiveness and time-to-market. Employees in such work organizations are involved decision-makers. Management layers disappear and bureaucracy decreases. Front-line employees' skills increase as they assume many tasks formerly reserved for managers.

"High-performance work organizations" structured this way require a highly skilled workforce. They must be equipped with basic skills and have content knowledge. In high-performance workplaces, employees in virtually every job function must be able to make wise decisions, use technology and manage information adeptly, communicate effectively and work in teams toward common goals -- and do so at levels of competency benchmarked to world standards of excellence.

Based on what we've learned in the context of our project about high performance skills, I underscore the NAM's support for this initiative to design and set national, voluntary industry-based efforts to identify needed employee competencies and skill standards. Such efforts are the underpinning of the high performance workplace and are crucial to a world-class workforce.

We do have some concerns, however, about the current language in Title IV of S.846. I would like to share them with you and hope the committee can clarify some of these issues and rework the language appropriately so that this measure can receive good business support.

This effort must be industry-led. And although others are needed to make this a team effort with other constituencies, a clear signal must be sent to business that it is in the forefront of this effort. Without that signal, voluntary standards cannot

work. Industry must use these standards. It must create them and be in control. Without that, a hollow, false-bottomed structure will be created that will not be used. Other countries have faced similar problems and faced failure when voluntary standards are not industry-led. To come to the party, we must organize it. Therefore, we recommend --

- that the chair of the board as described in Title IV be an industry-based individual for the first term.
- that the board itself be composed of a majority of representatives from business and industry trade associations and that workers, both union and non-union, be included. We also suggest that one-half of the education component be composed of representatives from community-type colleges.
- that the functions of the board be defined so it is clear that its job is only to define the industry clusters and set the criteria and processes for how industry standards should be developed. At no time should it set standards. All activities of the board should be totally non-binding and voluntary. All promulgation of standards must come from industry clusters. The board should endorse only that proper criteria and processes have been followed. The board should oversee the process, help keep chaos out of the system, but **never mandate.**
- that all certificates of mastery be issued by the industry clusters in partnership with community colleges.
- that any system to "periodically revise and update skill

standards and assessment and certification systems" be clearly understood and industry-led.

- that a sunset provision be included and that this process require congressional reauthorization in three to five years. This is a grand experiment. If it doesn't work, let's end it and try something else.
- finally, we understand there is amended language on the civil-rights section of Title IV. I have looked at it but am not a lawyer. It seems to say that businesses cannot rely on a skill standard, assessment or certification system in any civil-rights proceeding. The reality is that small business will rely on it. This language, as well as that pertaining to "methods for validating the fairness," unnecessarily burdens Title IV, which has as its major focus the development of a voluntary national system of skill standards and certifications. It is in no one's interest to revisit the many controversial issues debated during the passage of the Civil Rights Act. The principles of that act -- no more, no less -- should be applicable to Title IV to the extent that provisions relating to civil rights issues go further, those provisions should be stricken.

Voluntary skill standards could benefit all U.S. industries and workforces. They could change the way we understand work and give U.S. workers great new opportunities. They can encourage more companies, large and small, to create "high-performance workplaces"

to increase company productivity and enhance the competitiveness of all industry. They can increase opportunity, create clear career path options and motivate students who will know they are pursuing skills through education and job training that are needed in the workforce. We at the NAM are optimistic that the Congress can respond to our concerns, as well as to our hopes, that appropriate industry-led voluntary standards -- our new common language of jobs -- can help us all move to high performance and lead the world economy in manufacturing productivity and performance. I will be pleased to answer any questions the committee may have.



Workforce Readiness: How To Meet Our Greatest Competitive Challenges

**A Report to the Members of the
National Association of Manufacturers
December 1992**

National Association of Manufacturers



*This report was prepared under a partnership agreement between
the U.S. Department of Labor and the National Association of Manufacturers.*

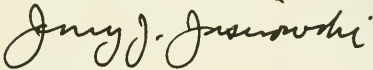
The National Association of Manufacturers (NAM) believes that America's economic well-being and competitive posture in the world is tied to how well it manages its human resources. For American manufacturers, remaining competitive in global markets will depend increasingly on the skills and knowledge of the nation's work force. The task is impressive. The new American workplace will look vastly different. Changing demographics—fewer entrants into the work force, an aging population, increased immigration, growing ethnic and cultural diversity—combined with the increased complexity of the workplace have made training and education of all American workers a critical necessity. Quality-driven changes with empowered teams that flatten hierarchies and provide greater autonomy for the work force, have translated into highly skilled workers who are responsible for their own productivity. This is essential to manufacturing success.

Our major trade competitors provide more and higher quality worker training and basic education than the U.S. In other countries, training and education on the job is seen as a permanent on-going need—a continuous learning environment is the norm, not the exception. On the whole, young Americans have lower academic capabilities than those in many other industrialized countries. More than ever, the U.S. work force is in direct competition to those in other industrialized nations. The less our workers are able to compete, the more our industrial competitiveness and living standard will fall.

Clearly, in the long run, we have no choice but to improve the education system. This is absolutely vital to our nation's success. Yet, people at work today will comprise a majority of the work force over most of the next two decades. Therefore, their training will have the greatest effect on current national competitiveness. Improving our schools and training displaced and hard-to-serve unemployed has been the focal point for the national debate on these issues. Only recently have policymakers turned their attention to the training and education needs of employed workers.

From the beginning, we believed this was an important place for the NAM to focus its work force readiness efforts—a place where we could have a special impact. High performance work creates challenges for employers trying to make a transition from traditional mass production to new work systems. In response to these challenges, we have made a commitment to help American manufacturers develop policies and practices that will facilitate and encourage this transition, through updating and upgrading the skills of current workers. The following report discusses the results of our current efforts to assist companies in meeting specific challenges to achieving high performance workplaces in America's manufacturing sector. We will continue to move ahead vigorously as we learn more about the changing American workplace.

A final word: One of the strongest impressions we took from the project was an intense and overwhelming pride that employers have in making fundamental changes in how work and organizations are structured. To a significant extent, workers also felt a personal pride in their willingness to work hard and to learn. If given the right training, they believed, American workers were second to none. We agree.



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Conclusion

I. Executive Summary

Creating high performance workplaces with the goal of improving the quality of products and services demands a much more highly skilled and empowered work force than we currently have. Updating and upgrading the skills of current workers combined with reorganizing work systems to achieve globally competitive levels of productivity is a fundamental challenge facing corporate America in the 1990s and beyond. To help manufacturers achieve high performance workplaces, information and technical assistance is needed to motivate senior management to action and provide them with proven strategies for getting started and sustaining progress.

A. Purpose

In light of these needs, the National Association of Manufacturers and the U.S. Department of Labor formed a public/private partnership to encourage small, medium and large manufacturers to create high performance work environments. Launched in November 1991, this joint project, "A Partnership in Work Force Readiness", set out to develop and implement an effective strategy to provide a continuing source of information and technical assistance targeted to CEOs and other senior executives.

The project conducted a series of focus groups designed to assess workplace attitudes and work force needs from CEO and worker perspectives and two pilot workshops designed to provide technical assistance responsive to those defined needs. This report describes efforts to date, key findings and next steps toward implementing the goal of the project.

B. Themes

The following cross-cutting themes emerged from the focus groups and workshops:

- CEOs are rethinking the processes around which work is organized and incorporating the principles of total quality systems. Some are just getting started, while others are well along the way. CEOs demonstrate substantial knowledge of the new total quality management methods. They view the use of teams and empowering front line workers as key elements in restructuring work toward increased efficiency and productivity.
- CEOs agree that U.S. manufacturers are changing, but perhaps at half the speed necessary to remain competitive. The "re-culturing" necessary for high performance is a very slow process, often impeded more by management, especially first-line supervisors, than by worker resistance.

- Management articulates a sense of optimism about their ability to compete and prosper in the future. Workers, however, feel powerless to control their economic futures, do not feel secure in their jobs, and are generally apprehensive about the future. They know that promises of lifetime employment are no longer possible.
- There is a disconnection between employer and worker perceptions about the benefits of creating a high performance workplace. Trust, based on honest and open communication, emerges as a key pre-condition for quality efforts to work over the long run.
- CEOs recognize the importance of training, especially occupation-specific skills training to match improving technology, but are generally cautious about general education programs. CEOs are less clear on the importance of training in higher order skills such as critical thinking and problem-solving to support restructuring of work through empowered workteams. Thus, less attention is being paid to the type of training and education needed to ensure the success of empowerment. Yet, workers see the value of all training as a way to ensure job security and company loyalty.
- CEOs believe that there must be a fundamental shift in the way in which the public views manufacturing and manufacturing jobs in order for them to attract and retain the talent they need to support quality improvements.

C. Key Elements for Success

The focus groups and workshops conducted to date demonstrate that the key elements for success in creating a high performance workplace include the following:

- Motivated, committed and sustained leadership at the top, and all levels of management including first-line supervisors, must be fostered.
- Enhanced communication geared toward achieving the mutual trust and shared goals between workers and management is needed to support empowerment. A clear, positive response to the worker's question—"what's in it for me?"—is critical.
- Increased investment in training is needed to permit changed work systems and product quality improvements to provide their ultimate benefits to the company and the worker. Training must be related to business goals, technological changes and work restructuring in order to succeed.
- Business, labor and government must work together to improve the schools, support the changes taking place in manufacturing, encourage innovation and avoid unnecessary government costs/burdens to business.

Enthusiasm and optimism about getting started or improving current efforts characterized the perceptions of CEOs at both the focus groups and workshops. However, technical assistance and information-sharing networks are needed to support such efforts. Project efforts to date suggest that creating opportunities for CEO-to-CEO exchanges of information and technical assistance and encouraging significant expansion of these exchanges nationwide provide the best vehicles for helping companies make these changes.

D. Next Steps

Keeping pace with technological changes, the reorganization of work and training and education are inextricably linked to achieving productivity, quality and flexibility in the workplace. Regaining and retaining global competitiveness in the manufacturing sector are dependent on companies successfully creating high performance work environments based on these three ingredients.

The project will continue refining its strategy for developing and implementing a continuous source of information and technical assistance to help CEOs meet these challenges. More focus groups and workshops will be held in 1993 to refine the models developed to date.

The workshops—used as a vehicle for providing CEO-to-CEO technical assistance—must continue to tackle the cross-cutting issues and strategies concerning:

- The improvement of communication between workers and management.
- The continuous development and upgrading of worker skills.
- The empowerment of front-line workers to use those enhanced skills.
- The total commitment to quality in all products and processes needed to achieve sustainable benefits.

Findings to date will be used to refine approaches to these topics. Additional focus groups will be tailored to further the research base around which technical assistance is designed for delivery through these workshops. And, finally, this technical assistance program will be institutionalized for nationwide dissemination.

II. Project Overview

American industry's commitment to improving the quality of our products and services demands a highly skilled and empowered work force. Updating and upgrading the skills of current workers is a fundamental challenge facing corporate America in the 1990s and beyond. Assisting manufacturers with this challenge spawned the development of a partnership project between the National Association of Manufacturers (NAM) and the U.S. Department of Labor (USDOL). Herein, we briefly describe the needs and provide an overview of the project. The remainder of this report documents project findings and next steps, and concludes with some final thoughts.

A. The Needs

More than half the manufacturers surveyed by the NAM in 1991 reported major worker skills deficiencies in basic math, reading and problem-solving. Twenty-five percent said they couldn't upgrade product quality because their workers lacked the needed skills to utilize new technologies. Thirty percent said they couldn't reorganize work activities because workers couldn't learn new jobs. This lack of basic skills is not only jeopardizing workers' opportunities for employment mobility and success, but also seriously damaging technological advancement, productivity and quality improvements within American companies.

Training and Changing Work Systems

Though businesses spend more than \$30 billion a year on education and training programs, most American companies have underinvested in workplace education for years compared to our key competitors around the world. According to the American Society for Training and Development, only one out of fourteen American workers has received any formal training from an employer. Furthermore, the investment is uneven with larger amounts going to professionals and managers rather than front-line workers.

Much more needs to be done. U.S. companies must expand their efforts to ensure that workers have the necessary skills and education to perform quality work, keep pace with changing technologies and enable America to remain competitive as we move into the next century.

Some of today's most competitive manufacturing companies, such as Motorola, Inc. and Xerox Corporation, have automated, high-wage and quality-conscious plants with a decentralized management system. Many smaller, less recognizable companies are taking similar dramatic steps. The days of factory workers performing only menial, repetitive tasks are in the past for these firms. Companies in the service industry, too, such as Federal Express, are challenging workers more than ever to help achieve ambitious corporate quality goals.

Workers in these high performance workplaces must be able to communicate with each other, work in teams, write a memo and run a meeting. They must know more sophisticated math to operate, reprogram and make repairs to computers and robots. The workers of tomorrow need to be empowered with higher skills, greater flexibility and risk-taking abilities to actually stop a production line, solve problems and make decisions.

Companies will have to get more involved if they want to win in the global marketplace of the 1990s and beyond. Clearly, one of the most important ways corporate America can contribute to strengthening our manufacturing and our economy's future is to dedicate themselves to strengthening the skills and education of the American work force.

Creating High Performance Workplaces

B. The Project

In light of these needs, the National Association of Manufacturers and the U.S. Department of Labor formed a private/public partnership to encourage small, medium and large manufacturers to create high performance work environments. This joint project, "A Partnership in Work Force Readiness", was launched in November 1991. Its purpose is to develop and implement an effective strategy to ensure employers a continuing source of information and technical assistance to achieve worker readiness and high performance workplaces.

The project charter signed by the President of the NAM and the Secretary of Labor further established the following specific goal, objectives and approach to guide project efforts and to motivate CEO participation in project activities.

"To encourage small, medium and large manufacturers to create a high performance work environment by investing in the education and training of their human resources and empowering them to make decisions that will make the manufacturers more globally competitive."

Goal

"To assess workplace attitudes and work force needs through a series of focus groups in geographically dispersed areas, with CEOs and employees of manufacturing firms."

Objectives

"To design and deliver pilot workshops for CEOs from the manufacturing sector to showcase innovative training and educational programs, and new ways of organizing work."

Approach

This project targeted its efforts toward soliciting the views and addressing the needs of CEOs as expressed by CEOs, making its approach unique among similar projects. This approach was based on the philosophy that CEOs are the only ones within the corporate structure who can truly bring about the fundamental changes needed to enhance quality, productivity, worker readiness and work systems. Additionally, very little was available in the literature that systematically documents the views of CEOs on these important topics. Hence, focus groups and workshops were aimed at this target audience.

Findings from the focus group research drove the workshop design and content. Responsiveness to manufacturing CEOs' needs, concerns and respective starting points was of paramount importance to designing a workshop that would capture their attention, motivate them to action and provide them with the ideas and tools to begin tackling these critical issues for themselves.

III. Focus Group Research and Findings

Fourteen (14) focus groups—ten (10) with employers, two (2) with union workers, and two (2) with non-union workers—were conducted in ten (10) different locations around the country during March and April 1992. Cities selected spanned a broad range of regional perspectives and included:

<i>Atlanta, GA</i>	<i>Denver, CO</i>
<i>Austin, TX</i>	<i>Los Angeles, CA</i>
<i>Boston, MA</i>	<i>Reading, PA</i>
<i>Chicago, IL</i>	<i>Raleigh, NC</i>
<i>Cleveland, OH</i>	<i>Seattle, WA</i>

The focus group research was designed to:

- Explore core attitudes of both management and workers which helped or hindered the creation of high performance work environments.
- Assess the level of worker training and education, and restructuring of work that is currently ongoing, including the practices used by companies to implement changes.
- Identify those linkages or resources in the public and private sectors that can be used to foster training and education, worker empowerment and work reorganization.

Four key cross-cutting themes emerged from both worker and CEO focus groups—to increase productivity and remain competitive, manufacturing must:

- Improve communication between workers and management.
- Find ways to continually develop and upgrade worker skills.
- Empower front-line workers to use those enhanced skills.
- Make a total commitment to quality in all of its products and processes.

The eleven key findings from which these themes emerged are presented on the following pages.

The focus group report, "**Work Force Readiness, A Manufacturing Perspective, June 1992,**" provides detailed findings and conclusions, and recaps all methodological details. This report is available through the NAM and the Office of Work-Based Learning, USDOL.

Objectives

Themes

Eleven Key Findings

Management Optimism vs. Worker Fear

All CEO groups articulated a sense of optimism about their ability to compete and prosper in the future. There was a clear sense that U.S. manufacturing companies had been tested over the last decade and that those who had survived by achieving a customer-driven /high quality focus and moving to an organization which involved empowered workers would remain competitive. CEOs felt that they had in most instances "turned the corner" and were very optimistic about the U.S. manufacturing sector in general. The optimism that was evidenced by most employers in all the CEO groups, however, was not found in the worker groups. In contrast, workers did not feel empowered. Although many had seniority in their companies, unless they were highly skilled and trained, they not only did not perceive themselves as secure in their jobs but also felt powerless to control their economic futures. They, unlike the CEOs, generally were very apprehensive about the future.

Work Force Stability: Not Lifetime Employment

There was a clear consensus that work force stability is critical to high levels of productivity, but no one felt that promises of lifetime employment were possible. This represents a fundamental attitude change. The fact that workers do not have a presumption of lifelong employment appears to be a critical factor in designing company policy in order to motivate, to encourage risk taking, to reward innovation, to induce loyalty and to create a corporate culture in which high performance on the factory floor continues.

School Systems Have Failed

All groups felt that the school systems are providing neither adequate basic skills nor an adequate understanding of business and the necessary work ethic. All CEO groups realized that they would have to bear the costs of remedial education and training as part of doing business in the U.S. And most recognized the need for CEO/business advocacy in the community for education reform. All groups felt that unless something radical is done, the schools will continue to fail to produce educated, employable workers.

Employers Moving Toward Work Restructuring

All executives agreed there is the need to rethink the processes around which work is organized and to incorporate the principles of total quality systems. They argued that training is an important, but not necessarily sufficient, component of this effort. Most of the executives described ongoing efforts that varied from the relatively basic to the sophisticated. The firms are being motivated to change by both increased competition and by pressure from customers along the supply chain.

All Agree on Benefits of Teams, Empowerment and Work Restructuring

There is a clear consensus among CEOs and workers that teams, empowerment and work restructuring lead to increased efficiency and productivity and strengthen a company's competitive edge.

Commitment at the Top

All groups agreed that fundamental change necessary to create a high performance workplace demands leadership from the top. Without a strong commitment from the CEOs, middle managers and first-line supervisors, no sustainable change is possible.

Eleven Key Findings (cont.)

Manufacturers Are Getting Smarter

All CEO groups agreed that U.S. manufacturers are changing, but at perhaps half the speed necessary to remain competitive. The "re-culturing" necessary for high performance is a very slow process, often impeded more by management—especially first-line supervisors—than by worker resistance.

CEOs Look to Peers

CEOs reported that customers and market competition forced them to reorganize work and offer more training, and that they were often guided by the "success stories" of other companies in planning their own programs. CEOs felt that company-to-company sharing is a very important source of technical assistance for small and medium sized companies and is provided by large companies with a commitment to quality.

Training Is the Highest Investment

Workers were anxious to receive training and saw increasing skills, including cross training, as a way to ensure job security and company loyalty. They were particularly interested when training was directly linked in their job, to career enhancement and to recognized certificates of training.

While acknowledging the importance of training, CEOs were cost-conscious about general education programs. They saw the immediate benefit of occupation-specific skills training to match improving technology—capital investment often drove training investment—and using teams as a means to improve skill levels. Many employers felt that, while reorganization of the workplace brought increased productivity, the productivity gains soon "hit the wall." Only an increased investment in training would permit them to break this barrier, and continue to deliver the advantages the workplace reorganization would bring to the company.

Communication/People Skills Are Critical

Both CEOs and workers saw better communication as essential to achieving the mutual trust necessary for high-performance work environments. Empowerment is based on knowledge recognition and shared goals—and a clear positive response to the question of "what's in it for me?" This is particularly true when lifelong company attachment is not possible and, therefore, insecurity becomes a permanent phenomenon among workers. While CEOs felt they were adequately communicating the ideas behind empowerment, most workers felt they were not. Many workers said that despite their CEO's attempts at regular communication, the CEO's communication abilities could be improved.

Strengthening Manufacturing Should Be National Policy

All groups felt that more must be done to support U.S. manufacturing. Business, labor and government should work together to improve the schools, support the changes taking place in manufacturing, encourage innovation and avoid unnecessary government costs/burdens to business. Workers were less hostile to the idea of government participation in the schools and in providing funding sources for worker education and training programs, while the CEOs felt that the federal government's role should be limited.

IV. Executive Forums (Workshops)

Two pilot workshops were held: one in Atlanta, GA at the Ritz-Carlton hotel during July 1992; and one in Chicago, IL at Motorola University, Schaumburg, during September 1992. The principal objectives for these workshops were:

- To motivate participants to invest in human resources development and organization of work needs, in an effort to create a high performance work environment that contributes to becoming more globally competitive.
- To demonstrate, by the example of CEOs who had mounted successful efforts, that the challenge can be met.
- To provide participants with innovative strategies and tools that can help them make it happen.

The four cross-cutting themes from the focus group research formed the central focus for each workshop design. The model workshop design (see Page 12) combines the key segments of both pilots which will form the basis for future workshops. Most importantly, the success of the pilot workshops hinged on the following three elements.

A. Plenary Sessions Featuring CEO Success Stories

The companies whose success stories were presented in the plenary sessions, with follow-up discussions during the breakout sessions, included:

Motorola, Inc., Schaumburg, IL (Atlanta & Chicago)

The Dana Victor Corp., Chicago, IL (Chicago)

The Plumley Company, Paris, TN (Atlanta)

The Will-Burt Company, Orville, OH (Atlanta & Chicago)

Collins & Aikman, Dalton, GA (Atlanta & Chicago)

"Great insight into real world problems and successes."

"Our attention was keenly focused on human resources development as our primary opportunity for investment in our business. The presenters were authentic, knowledgeable and real-world."

"Opened my eyes to obstacles I had not considered."

In each location, one local CEO with a corporate success story was invited to speak, with the other three being drawn from selected known high performance workplace companies based elsewhere. A balance was sought in terms of featuring small, medium and large companies.

These inspiring hands-on stories, from companies that faced challenges and succeeded, helped participants to see and feel the importance of quality, productivity and worker readiness to their competitiveness in the global marketplace. Furthermore, this peer-to-peer exchange—CEOs talking to CEOs—provided believable answers to real questions and obstacles that made sense to the participants.

The presenters had been there, had struggled and had proof positive of the rewarding results for their respective companies. Their experiences highlighted the fact that each company's road will be unique, trial and error will be the norm, and time, patience and perseverance will be needed to succeed.

CEO-to-CEO "training/informing" through presentation of corporate success stories and breakout group follow-up discussions worked well to motivate others to commit to learning more about why it is critical to become a high performance workplace and to develop commitment to act, and to figure out how to do it. Follow-up, however, will be needed to determine long-term impact.

"The presentations were excellent. Different companies at different levels who took different approaches."

B. Breakout Sessions Featuring Interactive Discussions and Activities

The CEO success story presenters facilitated breakout sessions from which the participants could choose two to attend. These included **Fostering Worker Empowerment, Making the Workplace a Learning Enterprise, Meeting the Quality Challenge and Enhancing Communication**. While the plenary sessions provided a broad view of how they each achieved quality, productivity and worker readiness, each presenter focused their breakout session on the specific tools and strategies used to achieve goals concerned with that particular topic.

With smaller groups, these sessions afforded the opportunity for participants to engage in experiential activities, lively interactive discussions with facilitators and fellow participants and targeted questions and answers. Herein, CEO participants shared their specific problems, learned about specific strategies and identified affordable resources to assist them in their respective efforts.

"Excellent presentation. Got several ideas on how to change my plant and develop people."

C. Plenary Session with an Empowered Work Team

The session on the empowered work team, "Heatwave" from Motorola, Inc., ~~presented by the workers~~, was a significant "eye opener" for CEOs in terms of the return on investment when workers are empowered. This presentation demonstrated the real monetary and human benefits of restructuring work using empowered work teams.

The discussion of how they became a team, how they work together as a team and how they have achieved productivity improvements as a team, helped participants understand exactly how work is done in a team management environment. Further, it showed CEOs that there is really nothing to fear in giving up traditional styles of management, just much to gain. One of the most lively and intense question and answer segments of both pilot workshops ensued following their presentation..

"Although I am fearful, I realize the importance of empowerment. I will act as a result."

Model Workshop Design

PLENARY SESSIONS	<p>What the Research Tells Us</p> <ul style="list-style-type: none"> ■ Why change?—U.S. productivity compared to other nations. ■ Linkage between productivity, profits and high performance workplaces. ■ How spending only \$385 per worker annually for training and education hurts us competitively. <p>Creating an Empowered Work Place-A National Perspective</p> <ul style="list-style-type: none"> ■ How work will get done and be managed in the 21st Century. ■ How can leadership create a culture open to change? ■ Changing the corporate culture through vision and values. <p>Four Corporate Success Stories</p> <ul style="list-style-type: none"> ■ New work systems and increased productivity, quality and profits. ■ People, our ultimate resource and the need for continuous learning. ■ Building a strong sense of ownership among workers for quality efforts to succeed. <p>An Empowered Work Team</p> <ul style="list-style-type: none"> ■ What is an empowered work team? What can it do for me? ■ Taking "ownership" of the day-to-day operations. ■ The human and monetary benefits for workers and employers.
BREAKOUT SESSIONS	<p>Fostering Worker Empowerment</p> <ul style="list-style-type: none"> ■ What's in it for your business?—decreased re-work, turnover and sick days; improved morale; greater work force flexibility; increased productivity, sales, profits and market share. ■ Examining the disconnect between CEOs' and workers' perceptions. ■ What's in it for workers? — enhanced job satisfaction, job security and the prospect of greater responsibility and compensation. <p>Making the Workplace a Learning Enterprise</p> <ul style="list-style-type: none"> ■ The "make" vs. "buy" dilemma in human resources. ■ Training for what?—the importance of front-end analyses. ■ Integrating training into your organizational fabric. <p>Meeting the Quality Challenge</p> <ul style="list-style-type: none"> ■ CEOs as change agents; managers and front-line workers as change drivers. ■ Quality goes beyond boundaries — creating both internal and external culture change. ■ "Hitting the wall" — when quality and productivity gains stall. <p>Enhancing Communication</p> <ul style="list-style-type: none"> ■ Communication is listening as well as talking — "My door is always open" is not enough. ■ In communication, actions speak louder than words. ■ Communication is uncomfortable — share most the information you want to share least
CLOSING PLENARY	<p>Next Steps</p> <ul style="list-style-type: none"> ■ Action planning ■ Resources ■ Building CEO networks

V. Lessons Learned

Several key lessons learned emerged from project activities to date. These will guide the project into the future as we conduct more focus groups and workshops. First, we present a series of lessons learned that concern key considerations for bringing workers into the corporate change strategy. Without this, changing to new work systems will surely fail. Secondly, we present our learnings about the project itself.

A. Key Considerations for Helping Companies Change

Change, particularly rapid and recurring change in a crisis driven atmosphere, is always very difficult to manage to accomplish any organizations' goals. We found this to be borne out in our focus group discussions with workers and affirmed in our focus groups and workshops with employers. When peoples' workplaces, work routine, job security, income, inter-personal relations, self-esteem and much more are not only subject to, but often the object of such change—as in the case of moving toward higher performing manufacturing organizations—the difficulty in achieving the objectives of change are compounded.

In general, workers in our four focus groups recognized that rapid change is happening and will affect their lives whether they like it or not. They recognize that competition is tougher than ever for their companies. They generally realize their personal economic security depends on their skills, ability to adapt to changing workplace demands and the fortune of their current employer. They do not believe their employers are doing all they need to do to succeed in this environment and to harness the positive energy of their work force in that endeavor. There is definitely a disconnect between worker and employer perceptions.

To increase the contribution of workers to corporate change objectives, and to reduce the resistance to it, the following observations are important for management to recognize and incorporate as they develop a strategy for becoming a high performance work organization. The project must help employers to consider these very carefully and must provide strategies and tools to do so.

Workers do not see their current employer as a "lifetime" employer, as they believe their parents did. Volatility is a major factor in their work life and multiple employers is what most expect. Therefore, any strategy designed to improve performance that requires workers to undergo change, will produce more insecurity and require a much greater effort to overcome that impediment. Arguments based on long-term phenomena will be much less compelling than they may have been to these workers' parents. Arguments, on the other hand, that relate to new marketable skill acquisition for example, may be much more compelling than in the past.

Recognizing Needed Changes**Implementing Change Strategies****Increasing Insecurity**

Buying Into Change

Given the above, there is more of a direct demand by workers to be clearly shown by employers: "What is in it for me?" If we are not in a nearly permanent relationship, change is much more threatening to "me" and the need to show "me" what I will be getting out of it is critical to "my" buying into the change agenda. Employers need direct, simple, believable and compelling answers. They need to deal with issues like job security, seniority, reward for effort, gain sharing and wage levels.

Unless the "answers" are believable and sufficient to motivate, real change in the workplace will be hard to achieve. Turnover among the best workers, absenteeism, productivity decline and greater rigidity, for example, could all result from paying too little attention to the answer given to workers who ask: "What is in it for me?"

Fostering Trust

Trust between workers and employers emerges as a key pre-condition to a high performance workplace. That trust requires a level of direct and honest communication that most workers found seriously lacking in their companies. And, most of the employer participants shared that view—though many are working to improve it.

Mutual respect, based on open communication about everything—from company conditions and production plans to management encouragement and reward for worker initiative was considered important. Workers felt employers have a long way to go in making the company spirit a "We" and not an "Us" versus "Them" situation. But, the broad-based desire for such a relationship coupled with the common sense and pride of the workers gives room for optimism that we can move in this direction.

Differing Perceptions

Many workers find a disconnection between the "quality" rhetoric and even cheerleading of top management and the real message as translated by first-line supervisors on the factory floor. Often a sincere CEO's message is stymied by a frightened "foreman" or "production supervisor." Training and orienting "foremen" must be an early mission in any corporate plan to become a high performance workplace.

Conflicting Directions

In this organizational environment, worker attitudes are pushed in two conflicting directions:

- First, workers are more apt to seek out opportunities to enhance their skills and broaden their knowledge to improve their value to their current employer and become more marketable if they lose their job.
- Second, workers are more apt to become "insecure" and often discourage or interfere with peer or subordinate training that could in any conceivable way make such trainees competitors.

In summary, the focus groups and workshops suggest the following regarding training:

Valuing Training

- First, training will only be worth the time and effort if workers see it is of value to them, either in their current job or with their current employer, or if they see it as having proximate value to a potential employer if they were soon in the job market.
- Second, anything that management can do to make the value the company attaches to training clearer to workers will increase the "take-up rate" in training (e.g., on-site, on work time, linked to pay increases) and the same holds for making it something that clearly gives them greater external marketability (e.g., a portable certificate or skill in the area of high local demand). The reverse is also true—off-site, off-work time, voluntary, non-pay linked, general education will often be seen to have little value.
- Third, training for literacy or remediation is difficult because of the stigma attached to it, but if re-designated and re-designed, it can be made more attractive. This makes "remediation," which workers say is much more necessary than the data indicates, even more difficult to deliver.

B. Key Considerations for Project Continuation

As the project unfolded, the use of NAM's network of state and employer associations and councils to stimulate CEO interest and involvement in the focus groups and workshops helped to broaden the base of information on best practices of high performance work environments. As more CEOs were contacted about the project, more was learned about high performance workplace initiatives among manufacturers, and more interest in the project was generated. The ripple effect was in full force.

This expanding network of manufacturers made aware of and expressing interest in the project led to an expansion of the cadre of corporations with success stories participating in the project. The project not only served to plant seeds, but also to help expand a network of those who will spur each other on, thereby creating deeper penetration and a multiplier effect nationwide. Future project efforts will need to focus on continuing to expand these networks.

Expanding Networks

CEOs demonstrated considerable enthusiasm and openness in discussing the real problems they face in maintaining or regaining their competitiveness in the marketplace. Additionally, CEOs demonstrated substantial knowledge of new management methods including total quality management principles and practices. This was true even of those who had not yet undertaken any major changes to restructure work or implement continuous learning programs. Project efforts will continue to tap this foundation.

Enhancing Technical Assistance

The project demonstrated that there is more activity in the manufacturing sector than the project team originally thought, particularly with regard to the reorganization of work toward high performance work environments. Enthusiasm and optimism about getting started or improving current efforts characterized the response of CEOs; however, technical assistance and networks to help them with the "how to's" for accomplishing the changes were noted needs. The project also demonstrated that less attention is being paid to the training and education needed to support reorganization. Future workshops will need to focus more on these needs.

Finally, the technical assistance offered via the workshops must further help CEOs with their change strategies. Development of additional tools to help CEOs overcome potential obstacles concerning increasing insecurity, buying into change, fostering trust, differing perceptions, conflicting directions and valuing training will be explored.

VI. Next Steps

The project team now plans to undertake additional focus groups and workshops to further the goals of the partnership. Lessons learned will drive all future work.

Specifically, the project will conduct four more focus groups of employers and workers from the same corporation to delve more deeply into empowerment, communication and reorganization of work issues in terms of the following:

- Specific practices that work and don't work in terms of team empowerment and development
- Persuasive strategies for overcoming obstacles to change
- Incentives for workers
- What training and education is reaching the front-line worker
- Regional differences
- Perception differences in communication (what employers think is being communicated as contrasted with what workers perceive)

Focus groups will be held in Portland, OR and St. Louis, MO in February and March 1993.

The project will also hold six more workshops based on lessons learned from the two pilots and what will be learned from the additional focus groups. These workshops will be held from April to October 1993 in: Cleveland, OH; Austin, TX; Los Angeles, CA; Rochester, NY; Hartford, CT; and Louisville, KY.

Lastly, the project plans to conduct a follow-up workshop in November 1993 bringing back CEOs from various regions of the country that participated to:

- Determine what affect the project had on helping CEOs in their training and reorganization of work efforts.
- Further develop the network of CEOs working on these quality improvement issues.
- Gain additional insights into how to motivate CEOs toward action and how to provide them with the technical assistance needed.

Based on the results of these additional focus groups and workshops, the project will work towards the institutionalization of this program to provide CEO's with a continuing source of information and technical assistance. Through these efforts, the project will fine-tune the workshop design for nationwide dissemination tailored to regional differences. The project will continue to target CEO/senior executive participation, to secure local success stories and to further expand the networks of CEO-to-CEO transfer of best practices in creating a high performance workplace. The findings to date strongly suggest that the need exists.

More Focus Groups

More Workshops

Follow-up

Institutionalization

Conclusion

For an increasing number of manufacturers, education and training is becoming an integral part of a competitive strategy—it's a key to continued growth. Well-trained, motivated workers who can produce high quality goods and services at low cost help enhance industrial productivity and competitiveness and keep America's living standards high. In today's international economy, workers must be prepared to change the way they do their jobs and employers must change the way they organize their work. If not, the benefits from a rapidly evolving technology will be lost. In the best, healthiest, most competitive firms, training is linked directly to productivity, quality and flexibility.

The employer's investment could be wasted if only training is provided without a clear business decision to reorganize work. Training in a vacuum is counterproductive—it must be related to business goals and use technology that can improve the quality of on-the-job training. It is our commitment to help our member companies and others—particularly small and medium-sized companies—adopt useful models for educating and training their current work force—and changing the way they work. Our companies that have adopted various forms of this model have found their workers can achieve levels of productivity and quality equal to and better than the rest of the industrialized world.

Having been "to the brink", CEOs and senior managers feel that the goal is not just to remain competitive but to regain America's pre-eminence in certain sectors. This could be accomplished within a global context (i.e., with plants off-shore, if necessary), but their message is clear: U.S. manufacturing can and must compete. The critical question remains: Can companies change fast enough?

Although they are far from Pollyanish, the CEOs see a real and immediate need to educate the public on the "good news in manufacturing." Much as the workshop success stories proved so catalytic, NAM's manufacturing campaign can create that same sense of hope and excitement among target audiences, including policy-makers and elected officials. The CEO's believe that there must be a fundamental shift in how the public views manufacturing and manufacturing jobs in order for them to be able to attract and retain the next generation of talented and motivated business leaders, managers and workers.

NAM and the USDOL can both do a great deal to heighten public awareness and to spotlight positive stories about manufacturing—from new ventures to turn-arounds. While the workshops and networks that they create will encourage the sharing of strategies company-to-company, a national awareness campaign undertaken by the NAM, will benefit all manufacturing—and, in turn, the national economy.

The Work Force Readiness Project Team

Chairman KILDEE. Thank you, Mr. Baroody. Dr. Sackett.

Mr. SACKETT. I am Paul Sackett, an industrial and organizational psychologist representing the American Psychological Association [APA]. I am currently President of APA's Division 14, the Society for Industrial and Organizational Psychology. I appreciate the opportunity to testify before the subcommittee today.

APA is a scientific and professional organization representing over 114,000 psychologists who work as researchers, educators, and practitioners in a variety of settings, including education and industry.

Psychologists have expertise in the identification of job-related skills, the development of standards, and the construction and use of assessment instruments like those referenced in this legislation.

APA offers strong support for this proposed legislation which seeks to establish national skills standards. While supporting the legislation, we have three issues we would like to address. First, we are concerned about the proposed makeup of the national skills standard board. We believe that it is critical that the board include assessment and measurement specialists. Second, we believe that skill standards and assessments should be evaluated in accordance with the document, the Standards for Educational and Psychological Tests, issued by APA and allied organizations.

Third, the bill offers effectiveness, reliability, validity and fairness as criteria the skill assessment should meet. We have concerns about ambiguity in the meaning of the terms "fairness" and "effectiveness." I would like to elaborate on each of these three points.

Our first concern is the makeup of the National Skill Standards Board. Title IV calls for the proposed board to include involvement of business, labor, educational and civil rights communities. However, the board charges to stimulate the development and adoption of a voluntary national system of skill standards and certification calls for expertise in assessment in job analysis and skill standards and development. APA believes it is imperative that experts in psychology and psychometrics be included on the board if it is expected to develop, review, and evaluate skill standards and assessment systems.

APA is deeply concerned that the composition of the board as presently described in this legislation does not recognize the importance of scientific and technical expertise in these areas. Title II of the Educate America Act does recognize the importance of such expertise in creating the National Education Standards and Improvement Council, ensuring that experts in measurement acknowledged assessment be appointed. We strongly believe that the skill standards and assessments require similar levels of technical expertise as that already recognized for the educational components of the legislation.

Our second point is to call attention to professional standards related to assessment. APA, the American Educational Research Association, and the National Council on Measurement in Education have issued a document titled Standards for Educational and Psychological Testing which address the development, validation and use of all forms of tests and assessments in education and employment settings.

These standards have been referenced in Federal laws and Supreme Court decisions that concern assessment and are essential professional guidelines. We urge that skills assessments as well as educational assessments to be developed under this initiative be evaluated along the technical properties outlined in these standards.

Our third concern is with section 403(b)(2)(C) which states that the development of assessment systems should, quote, include methods for verifying the effectiveness and validity, reliability, and fairness of the assessment and certification systems.

We recommend striking the word "fairness" as there are many opinions as to the meaning of the term and as to the methods by which it can be evaluated. To some, the term "fairness" refers to what we would call "procedural fairness" and refers to issues like equity in access to the preparation for the assessment, equity in the conditions under which the assessments are conducted, and avoidance of culturally-loaded language in the instructions for and content of the assessment instruments.

To others, the term "fairness" refers to various forms of what we would call "outcome fairness," including mandating equal certification rates for all subgroups. We caution against mandating equality of outcomes in the form of comparable certification rates from majority and minority groups, and in particular, against any suggestion that such outcomes are to be achieved through score adjustment by subgroup. The Civil Rights Act of 1991 prohibits employers from using such score adjustments and it does not seem prudent to propose procedures that are at odds with existing civil rights legislation.

In addition, we believe that a most crucial issue is to insure that the assessment methods used provide an accurate picture of job-related individual achievement. If we acknowledge our inequities in opportunities in our society, we must acknowledge that these will be reflected in the outcomes of our assessments. A reliable and valid system of assessment offers a mechanism for identifying deficiencies and monitoring improvements in levels of achievement over time.

We also recommend either striking the term "effectiveness" or clearly defining it. Professional and technical standards clearly define reliability and validity. However, effectiveness is simply a term largely open for interpretation in this context of certification assessment.

In closing, APA encourages the development of voluntary national skill standards. We support the development and use of assessments that are psychometrically sound and represent the skills required for high performance workplaces today and in the future. We stand ready to offer our technical expertise for this effort. I would be pleased to answer any questions the committee may have. Thank you.

Chairman KILDEE. Thank you very much.

[The prepared statement of Mr. Sackett follows:]

Paul R. Sackett, Ph.D.

I am Paul Sackett, Ph.D., an industrial and organizational psychologist representing the American Psychological Association (APA). I am currently president of APA's Division 14, the Society for Industrial and Organizational Psychology, Inc. (SIOP). I would like to thank Chairman Kildee for this opportunity to testify before this Subcommittee today.

APA is a scientific and professional organization representing over 114,000 psychologists who work as researchers, educators, and practitioners in a variety of settings including education and industry. Psychologists in several of APA's Divisions have direct expertise in the analysis of jobs, the identification of job-related skills, the development of standards, the design of educational programs, and the construction and use of assessment instruments similar to the certification assessments referenced in this legislation.

APA offers strong support for this proposed legislation which seeks to establish national skill standards, but more importantly recognizes the need to develop and maintain the quality of the nation's human capital in order to foster a high performance workforce and our nation's global competitiveness. As a nation we have long ago recognized the importance of technological advances and economic incentives for businesses to remain competitive. However, we have all too often been willing to overlook the important contributions of the individual worker to organizational and national goals.

Title IV of Goals 2000: The Educate America Act of 1993 is truly ambitious in seeking to reinvigorate America's economic competitiveness and produce a high

performance workforce. Such an effort to establish high national skill standards across broad occupational clusters can move our nation toward one common typology or classification system for describing occupational skills and requirements. However, to be truly effective in some of the proposed applications, high standards must reflect the actual requirements of today's occupations as well as those of tomorrow. Broad industry-based skill standards alone may not provide the level of precision required to adequately predict or describe job performance in today's changing work environments. We must recognize that skill standards and resulting assessments cannot completely replace specialized and sophisticated selection, training, and evaluation systems required for specific occupations, work environments and organizations. The development of a certification system must not prevent employers from using company-specific selection systems, or from setting high skill level requirements as needed.

The National Skill Standards Board

Title IV calls for the proposed National Skill Standards Board to include involvement of business, labor, educational and civil rights communities. However, the Board's charges to stimulate the development and adoption of a voluntary national system of skill standards and certification calls for expertise in assessment, job analysis, skill standards development and organizational behavior. APA believes that it is imperative that experts in industrial and organizational psychology and psychometrics be included on the Board if it is expected to develop,

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review, and evaluate skill standards and assessment systems. Pitfalls that were encountered with some education reform initiatives by not enlisting experts from the beginning could be avoided in this important endeavor.

If skill standards are the foundation of a high performance workforce, then job analysis is the cornerstone on which this initiative, and similar efforts must rest. The psychological technology of job analysis is essential for both identifying the types and levels of knowledge, skills, and abilities required for job performance, and grouping jobs in terms of these similar requirements. Since such data will eventually be used for several high stakes purposes such as developing skill standards, assessment systems, and certificates of mastery, we strongly urge the Committee to ensure considerable resources and expertise are devoted to these early tasks.

Numerous other complex and technical applications proposed in this legislation such as the design and evaluation of valid and reliable assessment systems, the specification of appropriate levels of skill mastery, and the evaluation of industry-based programs for training and assessment require applications grounded in behavioral science research. Experts in industrial-organizational psychology and psychometrics can provide the needed technical expertise that will be crucial at the front end of these initiatives.

Measurement specialists are particularly important to this system. As Linda Morra from the General Accounting Office (GAO) testified to the Senate Labor and Human Resources Committee last Friday, these skill standards and

certification programs require a tremendous maintenance effort to maintain the state-of-the-art. This means ongoing revision of skill standards and often an annual revision of certification assessments.

APA is deeply concerned that the composition of the National Skills Board, as presently described in this legislation, does not recognize the importance of scientific and technical expertise in these areas. Title II of the Educate America Act recognizes the importance of such expertise in creating the National Education Standards and Improvement Council (NESIC), ensuring that experts in measurement and assessment be appointed. We strongly believe that skill standards and assessments require similar levels of technical expertise as that already recognized for the educational components of this legislation.

Assessment

The American Psychological Association (APA), American Educational Research Association (AERA), and National Council on Measurement in Education (NCME) have issued Standards for Educational and Psychological Testing which address the development, validation, and use of all forms of tests and assessments in education and employment settings. These standards have been referenced in federal laws and Supreme Court decisions that concern assessment and are essential professional guidelines that address the technical properties of assessments, including validity and reliability. We urge that skills assessments, as well as educational assessments, to be developed under this initiative, be

evaluated along technical properties outlined in these standards. APA's Division 14's Principles for the Validation and Use of Personnel Selection Procedures and Uniform Guidelines for Employment Selection Procedures (Equal Employment Opportunity Commission) should also be considered relevant to the development and use of skills assessments.

To hold such important national assessments to any lesser standards would undermine the importance of validity and reliability for such assessments. Although there are claims that these standards apply only to objective paper and pencil tests it should be noted that the authors of the Standards state they apply to tests, performance tasks (e.g., performance assessments), questionnaires, and structured behavioral samples, and that "they may also be usefully applied in varying degrees to the entire range of assessment techniques (p. 4)." In concurring with the judgement of the Supreme Court in Watson v. Fort Worth Bank and Trust (1988), Justices Blackmun, Brennan, and Marshall cited an amicus curiae brief submitted by APA adding "a variety of methods are available for establishing the link between these (subjective) selection processes and job performance, just as they are for objective-selection devices (p.8)."

A wide variety of valid and useful assessment instruments is currently used in educational and employment settings; among these are performance assessments, cognitive ability tests, behavioral observations, etc. The choice of specific assessment instruments should be driven by the intended purpose of the assessment and the requirement that the instruments have acceptable levels of

validity and reliability. We do not believe that specific types of assessments should be mandated in advance of such information, as stated in Section 403 (b) (2) (B). Instead, we recommend an approach that would urge that developers of proposed systems of assessment and certification explore the use of a variety of assessment and evaluation techniques.

Fairness

We understand that several versions of amendments to Title IV have been circulating in the past week or so and would like to note that our specific comments address a May 13 mark-up. In the following comments we also address the issue of fairness in a general sense.

Referring to section 403 (b) (2) (C):

includes methods for verifying the effectiveness and validity, reliability, and fairness of the assessment and certification system for its intended purposes and methods for certifying that the assessment and certification system is consistent with relevant, nationally recognized professional and technical standards for assessment and certification.

We recommend striking the word "fairness," as there are many opinions as to the meaning of the term and as to the methods by which it can be evaluated. To some the term refers to what we will call "procedural fairness," and refers to issues like equity in access to preparation for the assessment, equity in the conditions under

which the assessments are conducted, and avoidance of culturally loaded language in the instructions for and content of the assessment instruments. To others the term "fairness" refers to various forms of what we would call "outcome fairness," which includes mandating equal certification rates for all subgroups.

The 1978 Uniform Guidelines for Employment Selection Procedures, for example, acknowledge that fairness is "a developing concept," and endorse one particular psychometric model for evaluating fairness. This model, which compares group differences on a selection device with group differences in job performance, places extensive technical demands on employers, and these guidelines acknowledge that such fairness analyses will not be technically feasible in many settings. Recognizing that fairness is a matter of social values, and not a technical term, the APA/AERA/NCME Standards for Educational and Psychological Testing do not use the term "fairness."

We caution against mandating equality of outcomes in the form of comparable certification rates for all groups, and in particular against any suggestion that such outcomes are to be achieved through score adjustment by subgroup. The Civil Rights Act of 1991 prohibits employers from using such score adjustments, and it does not seem prudent to propose procedures that are at odds with existing civil rights legislation. In addition, we believe that a most crucial issue is to insure that the assessment methods used provide an accurate picture of job-related individual achievement. If we acknowledge that there are inequities in opportunity in our society, we must acknowledge that these will be reflected in the

outcomes of our assessments. A reliable and valid system of assessments offers a mechanism for identifying deficiencies and for monitoring improvement in levels of achievement over time.

We also recommend either striking the term 'effectiveness' or clearly defining it. Our technical and professional standards and principles clearly define reliability and validity and appropriate purposes and uses for assessment. However, effectiveness is simply a term that is largely open for interpretation in this context of certification assessment.

In closing, APA encourages the development of voluntary national skill standards. We support the development and use of assessments that are psychometrically sound and represent the skills required for high-performance workplaces today and in the future. We stand ready to offer our technical expertise for this effort. I will be pleased to answer any questions the committee may have.

Chairman KILDEE. Thank all of you for your testimony. We will begin some questions.

Now, the national skill standards board proposed by Secretary Reich, Title IV of this bill, would devise certain occupational standards. The question I would like to have answered is how specific and how generic would those be? What type of skills would be developed for a particular industry? For example, we have the health care industry, pharmaceuticals, textiles, auto, electronics, would they limit themselves to setting certain skills for certain industry clusters? How specific would they get and would they address the idea of some certain generic work skills?

Mr. TUCKER. Mr. Chairman, I would propose that you think about a skill standards system for the United States consisting of three tiers. The first tier would essentially represent that level and kind of skill which everybody in the society is meant to achieve in common before they go their separate ways. In effect, that tier of standard setting would be the focus of the national council established in Title II of this Act.

The second tier would be the tier that would be set by this panel. And I would propose—

Chairman KILDEE. The first would be more generic.

Mr. TUCKER. It would not only be generic but it would, in essence, serve as the foundation, the common foundation that everybody in the society had before they, as I say, went their separate ways.

Chairman KILDEE. Okay. I want to follow this because in your testimony you constantly referred to this as a component of a system.

Mr. TUCKER. Correct. That is right. Now, in the second tier, I would suggest that would be set by this panel that we are here discussing. And that tier essentially would be a set of skill standards for people who had met the first set, were not going at least immediately to a 4-year college for a baccalaureate degree and wished to enter the workforce for most of the jobs in the economy.

I would propose that this tier consist of not more than 20 standards, not more than 20 standards.

Obviously if that were the case, they would have to be very broad, that is not individual—certainly not individual jobs or occupations, probably not individual industries, but very broad industry groups. If you were going to encompass virtually the whole economy with only 20 standards, they would have to be broad. They would be of the kind that Sheryl was just talking about earlier.

Now, you recall that she talked about three standards for electronics but she also said that those standards were not particular to electronics, if you remember.

So that would require, in essence, that electronics set a standard for itself but that it be in very close communication with the other 19 standard setting bodies. Because they would have to be in common. I will get back to that in a moment.

Now, what that would mean obviously if there are only 20 standards is they would be very broad encompassing many jobs. It is clear that for many of the tasks in our society below the baccalaureate level you need more specialized training than that.

I don't think that next level of training ought to be the proper purview of the national skill standards board or any federally established body. Any occupational group, industry group, or even a single firm may wish to build a standard on top of these broad standards that I just described: For operators of particular kinds of laser measurement devices, for example, or very specialized welding or you can imagine many others.

The advantage of having a system like this is that you can get very broad mobility for workers in the society because the standards are broad. They aren't tied down to a particular defined occupation or job when that job may not exist 6 months from now, 18 months from now, or 24 months from now. That is why the AEA built the kind of standards that it is building.

On the other hand, what it does is provide a target to shoot at for individuals that will serve the economy and themselves well and it provides a very high foundation on which individual firms, industries, and associations can then build specialized skill sets if they want to and need to. So we get the best of specialization and the best of breadth and mobility.

Now, if you had a system like that and you think about these as outcome standards, right, define what you are shooting at, not how you get there. Then you can have the same standards for everybody, whether you are a dislocated worker, whether you are in your Federal job training program, whether you are a kid just starting out in a technical program or an apprenticeship program. They are the same standards.

What the system is telling you is if you want a job in the electronics industry to all the employers in the electronics industry all over the country that subscribe to this standard, here is what you have to shoot at. It is not just saying that to a young kid or a dislocated worker, but it is also saying that to the community college or to the high school. If you want to be in the business of helping people to develop skills to get into this industry, here is the standard you have to shoot at.

So the standard has got nothing to do with how old you are and the standard has got nothing to do with which institution is preparing you for it. It is an outcome standard. And it is the same for everybody.

Chairman KILDEE. Then you would have one level in this system—I know you and Dr. Reich both keep stressing the word "system," singular.

Mr. TUCKER. One.

Chairman KILDEE. And various parts—various elements are components, a little bit redundant there, but are components of that. On one level you would have some generic skills; another level you would have some industrial skills. When you say 20, you mean 20 industries or 20 sets of skills?

Ms. FIELDS-TYLER. I would like to address that point a little bit more in depth than what I think Marc was hinting at.

I don't know necessarily that the number is 20, but I think that there will be a number probably greater than 10 and less than 50 that we can look at as the aggregate sort of the fundamental roles that are the next step beyond high school or—it is beyond entry-level but it is really work ready in some very general but yet spe-

cific ways for the world to work. For instance, in the occupations we described, manufacturing specialists could cut across lots of different industries. That would be one example, for instance, of one of 20 or one of 30 that could cut across lots of different roles, a lot of different industries.

Another may be something like administration and information services which would be preparing someone to go in an administrative function in a company. Perhaps my industry, for instance, would want to build on that general vocational qualification, if you will; the next thing you would get after you got your basic qualification that would make you a little more specialized but not terribly specialized in terms of industry specific.

We might want to build on that, what it would take to become a manager, for instance. Because you would be building on the kind of skills that you need as a good administrator if you were going to move up and become a project manager. That might mean additional education. It might mean just general workplace acquisition of skills. It could mean all kinds of different things.

I think, again, the point is that if we can get to the point where we, again, envision this as a very broad national system where we have various occupations that are bridging the gap between what someone does when they leave high school, if you will, and what they really need to do when they are fully occupationally trained, or if you want to think of it in terms of dislocated workers, what you do when you leave the workforce from one job that has gone away versus what you need to be prepared for going to another occupation. That is what these general vocational qualifications or general vocational credentials might serve as.

I think there is a lot of work that needs to be done to imagine how this might play out, but I think it is very important that the system be designed with this kind of vision in mind because it is really at this point that the whole system starts to work together.

MR. TUCKER. I was, in my prepared testimony, and in my opening remarks pleading with you not to set a rigid structure in place in the subdivisions of the work of this board, and to delegate all the standard setting functions to those subdivisions, and it is precisely these kinds of considerations that lead me in that direction.

Sheryl's group started out with an industry definition of the standard, and they decided on a set of very broad generic roles which cut across, not only across their own industry but many others. I think there is an enormous job to be done, to think about what the right categories are, and then to make sure that whatever they are, they fit together. That is crucial.

Chairman KILDEE. Speaking of fitting together, and I will finish right here, you have the generic skills and you have the industry skills. How will those plug into the traditional apprenticeship programs that lead a person to some of the skills that have been licensed and where you had a long-standing apprenticeship program, electrician. How would they tie into that at some point?

MR. TUCKER. There is a lot of concern, as I know you know, among those organizations that are operating registered apprenticeship programs as to how the administration's proposal is going to affect them.

One possibility that has been discussed of course is that by law it won't, that is to say whatever the law is that you write on apprenticeship programs, youth apprenticeship programs contains a provision that says that will not in any way affect registered apprenticeship programs. That is one possible outcome that they just stay the way they are irrespective of the rest of the way the system develops.

There are obviously other alternatives. I don't have a particular view on that. I think that what is crucial is that the country as a whole develop a system by which kids, first of all, have a high level of academic attainment by the age of 16 or thereabouts and then a substantial proportion of them then go into programs of combined academics and structured on-the-job training that terminates in meeting one of the standards that this board is going to set.

I think of that as an apprenticeship program. You can call it whatever you like but it is the root that most advanced developed countries are now using to get people up to a high level of skill qualification.

Chairman KILDEE. Just a quick summary then. Title II and Title IV in this bill could be passed to the traditional apprenticeship programs that already exist in this country.

Mr. TUCKER. They may and that is not necessarily the case. It is a matter of what you choose. I don't think the answer to that would seriously affect the design of the system as a whole.

Chairman KILDEE. They could be passed?

Mr. TUCKER. Correct.

Chairman KILDEE. Mr. Goodling?

Mr. GOODLING. No questions.

Chairman KILDEE. Mr. Gunderson.

Mr. GUNDERSON. Thank you, Mr. Chairman, and thank you all for your testimony. I am tempted to put you all into a room and lock the door and say come back to us with agreed-upon language and then we will solve this problem. Frankly, if you think you could do it, I really would like to encourage the six of you to see if you could put that together.

This board befuddles me. It befuddles me because as I listen to you two answer Mr. Kildee's questions I am really concerned how we get a board that is going to serve that kind of mission when you are going to get presidential appointments and you are going to get Bob Dole appointments and George Mitchell appointments and Tom Foley appointments and Bob Michel appointments.

I mean, it is all going to be political and then we are going to give this board this mission which says now don't be political, be cooperative and be broad based and forward looking, and I don't know how it gets done. I mean, it is like asking for mission impossible and I am willing to give up on Republican appointments if we can give up on Democratic appointments and we can figure out how we get a board that is supposed to do what this board is supposed to do and anybody who has got—let me give you an example. I would like a couple of you to address.

You obviously know and you have articulated the issue and the concern about business and industry sense of ownership. But let's take the eight representatives from presently organized labor. If we

take your electronics industry, am I correct that something like 90 percent of the electronics industry is not organized?

Ms. FIELDS-TYLER. Yes.

Mr. GUNDERSON. So in that whole field we are clearly going to have distorted representation from the panel. I am not against organized labor at all being on this panel, but I am very concerned that, as you just articulated, Mr. Tucker, we don't end up with a policy in political payoff to representatives' registered apprenticeship programs who want to protect their apprenticeship programs when what we are supposed to be doing is, frankly, defining skills standards for all new kinds of industries for the 21st century, not protecting the construction trades of the 1950s.

Now, how do we do this? Any ideas? What do we do here?

Mr. TUCKER. Well, you would think it is impossible to do this except if you look at a number of other countries they have found a way to do it, often dealing with antagonism. My own view of this, if we cannot work together to create a board that will work together then there isn't much hope for any country. Because there are a whole lot of us who think if each of us end up going our own separate ways irrespective of what anybody else does we won't have an economy to worry about in another 10 or 20 years. I think it is a question of our political capacity to find a way to work with one another.

Mr. GUNDERSON. I agree with that.

Mr. TUCKER. On these issues, and I don't know, I am reasonably confident for some strange reason that this can be done, that once the board is formed and people have a task to do, that they will do it. And you know Mr. Baroody says if this didn't work in 3 to 5 years, try something else. I don't know a better answer than that one.

Mr. GUNDERSON. Go ahead.

Ms. PIESERT. I can point to the experience we already had with the two projects we are working on with the Department of Education which has representatives from the hospital industry, from unions, from education, and really in many ways, to our surprise, the process is going very well, because we want for our members what employers want. We want to meet their expectations. We want people to be employable, to have these skills and we—this group when we sat and we talked about the health care industry, there is a very unified group behind the theme of we are really here talking about patient care, better patient care, quality work-force, quality services, and how to—what kind of skills do we need to get there; how do we get this industry moving into the next century? So I think there has been a lot of agreement on—

Mr. GUNDERSON. Let me ask you, do you insist that all eight people from labor side must be from organized labor?

Ms. PIESERT. I guess that is our position, that is right, yes.

Mr. GUNDERSON. I mean, all right. What do we do? With the electronics industry. I mean, I don't want a management appointee in the name of a worker any more than you do, but at the same time I don't want to preclude from membership in this board the very people which are the emerging industries. How do we solve that problem?

Ms. PIESERT. Well, I think maybe labor does want to be a full and equal partner. I think many of the industries that have experience in the apprenticeship programs do have a lot to offer; have been through the process.

Mr. GUNDERSON. Okay. What about requiring that of the eight representatives from business and industry. You must have representatives from both unionized and nonunionized shops and then you have the same requirement from the eight representatives from the workers that they must be from both organized and not organized, so we will see to it that there are people on both sides of that equation that work with organized entities. I mean, is that okay? I mean, can you buy off on that?

Ms. PIESERT. Well, we are open to further discussion on it, I am sure.

Mr. GUNDERSON. That is a good answer.

Mr. BAROODY. If I could just comment. First, of course, we would endorse that. We already have. It was in my opening statement.

I think that the question you raise about the political nature of the board, is a serious one. We have thought about it a lot at NAM and we have looked at it two ways. One is we have what we think are serious and to us very substantial points about the change in the composition of the board. We believe very strongly that if it is going to be credible to American industry, it has to be led by American industry and, yes, that means a majority of the members of the board should be from industry. That is the first point, but it is almost less important in my view than the second point we also make.

To guard against the concerns you have raised, we think it is definingly important that the Congress think very carefully about the functions of the board and that those functions be quite constrained, quite limited, to identifying industry, includes centers, and to ensuring that the process of the development of skill standards is a legitimate process and that is about the limit of it as far as we are concerned.

I don't object to the discussion that went before about the desire to establish a system. I don't want to get into a semantic argument here, but if it is a system that we are trying to establish, we would urge that it be understood to be a pluralistic system rather than one that is centrally dictated and dominated by a board or by the Federal Government.

We are trying to develop some information, if we can, we would be eager to share it with the committee, about attempts to do similar things in other countries which have been, because they were too dominated by a central authority, the government, simply failed because industry wouldn't buy into them, and if I can develop that information and we are making work of it, I would be happy to share it with the committee.

Ms. FIELDS-TYLER. Could I make one comment to that point?

Chairman KILDEE. Certainly.

Ms. FIELDS-TYLER. In our industry, we have had a lot of experience with big systems on the technology side and they found a metaphor that is helping us think through the role of this board. This board should not act like a mainframe computer with dumb terminals leading into it from a lot of different points of view. This

board should be like a network server with lots of very smart, maybe even smarter, groups working together to input to the network to create one common language with every stakeholder represented, but again one system.

It is a very important image to hold in mind and it is not one that we do very well, frankly, in our government, is to try to hold that tension of bringing the pluralism together in one system but also keeping the distinctive parts. I think that image for us, we keep going back to that network server mode. It is absolutely essential that the server be there and that it is absolutely top notch in terms of its technology capacity, in terms of its information capacity, and its dissemination and communication role, but it is not—it does not replace all the constituent parts. It brings it all together and makes it a system and I think for us that is helping us think through this board concept.

Mr. TUCKER. One last word on this subject.

Chairman KILDEE. Yes.

Mr. TUCKER. I think the suggestion made by two of these panelists that the chairman be from the ranks of the employers, I hope this committee seriously considers that suggestion. I think that is—that may be the key to unlocking this puzzle.

Chairman KILDEE. One more question.

Mr. GUNDERSON. Thank you, Mr. Chairman.

Listening to you all, I think it is really important and I want to see if anybody disagrees with this. Let's assume, and I think we all agree on what the general authority of the board is, but let's assume to make—to execute that we change the selection and makeup of the board so that, very frankly, the President would name all 28 members, that we would require that no more than, say, 50 or 60 percent of those could be from one party so we guarantee a bipartisan makeup. We would require that both the business representatives and the labor representatives be from—reflective of unionized and nonunionized organizations, that the chairman of the board initially come from the business perspective, that at least half of the representatives from education come from community colleges and that we do have the sunset provision.

Now, if we made all of those changes is there anybody that would disagree with those?

Ms. FIELDS-TYLER. No.

Mr. TUCKER. No.

Mr. GUNDERSON. Good. I will quit while I am ahead.

Chairman KILDEE. Some may have used the Fifth Amendment. Mrs. Unsold? Ms. Woolsey?

Ms. WOOLSEY. I have so many questions it would take years. I am from a high-tech background. I was a human resources member of AEA for years. In fact, I have trained for the AEA in the North Bank. One of my major concerns is staying current. I used the big occupational dictionary as a human resources consultant over the years. My fear is we will have something like that and it won't be current by the time we get this together. So do you think that if we get our heads together and we can agree that we are going on the right path we can do this and keep it current?

Ms. FIELDS-TYLER. Representative Woolsey, I think you have hit the nail on the head. For our industry, this is absolutely the

bottom-line factor, is whether or not these credentials, these standards, are going to remain valid and current over time. That means that we need to be constantly pushing ourselves to move as far out on the wave front of innovation in the way that we think about this as we can.

We are never going to be done. It is going to be a continuous improvement model. You don't set standards and then 5 years later look at them again and decide you were right the first time. Every year, every quarter, whatever we decide is the appropriate sort of mode of updating, is what we need to do and that may be different depending on the occupation.

There are some occupations that are undergoing tremendous change. Others that are fairly stable right now, but may be changing over time, and I think that this sort of mode of continuous improvement is absolutely critical.

In our own model, we are working very hard to get standards established in 1 year. A lot of our trading partners nationally take up to 2 years to do what we are trying to do basically in 10 months.

Our point back to them and our point to ourselves is if we can't do it this fast and we can't do it well this quickly, then we shouldn't be doing it because that is how quickly we are going to have to move to keep them updated as well. I think it is a very important point.

Mr. BAROODY. Ms. Woolsey, the point you have raised is just another one of the reasons why we are so concerned that the system, if you will, be pluralistic, that it not be too heavily dominated by a single entity, the board, because that is antithetical to keeping the standards flexible and current.

You have rightly suggested that that has to be a very high priority. What our members learn as they reorganize their workforce is that the premium has to be put on flexibility and too centralized a control of this operation is at war with that flexibility and at war with your objective of keeping us current.

Ms. WOOLSEY. On the other hand, though, if we have it so flexible with not enough structure we will duplicate all over the country and we will be missing some professions and duplicating others. We have to be really careful, or we won't be talking in the same language.

Mr. BAROODY. I think we have to make sure we have just enough structure and that is what part of this discussion is all about. I wouldn't disagree.

Ms. WOOLSEY. Yes?

Mr. TUCKER. If I might comment on that point, your question is the reason I come to this idea of a three-tier structure of standards because if we have a small number, call it 20, call it 25, 15, of basic standards beyond the high school standard, and then the specialization, in effect, comes on top of that and you don't have this standards group involved at all in setting the three tiers of standards, then you get what Mr. Baroody wants at the third tier level. You can have an enormous variety of changing standards at the third tier level. You don't have to come back at any central body to do that. If you have the second tier in place and you only have 20 and they are pretty general, then you don't get yourself in the box constantly of being out of date all the time.

In my view that is the way to get it, the answer to your question. If you get at it by saying this board will only operate in a fairly general and vague way and you can have lots and lots and lots of different kinds of standards approved by it, some perhaps in conflict with others, then I think you have, in fact, a Tower of Babel. You don't have a system at all. It is the three-tier system that is the key, I believe, to answering your question, which is the right question.

Chairman KILDEE. Mr. Valdes-Pages?

Mr. VALDES-PAGES. Thank you. At our college we found we have to review our curriculum and our standards every quarter. It seems like overkill but we find that minor changes over a long period of time become major changes and it is a lot easier to incorporate minor changes into the curriculum quarterly than make major changes every 2 or 3 years. It is a valid point. We do it at a small college. I don't know how you incorporate that into a national standard.

Ms. WOOLSEY. By being more general I believe.

I have another major concern and one of the things I want you to know is that I see this board and this effort as being a true partnership between education, labor, industry, and government. So given that the national skills standards board reflects this partnership and that there is ethnic, gender, and geographic diversity, will this be enough, in your opinion, to ensure that the standards and assessments that we develop will be bias free, that we just won't have good testers that are successful through this process? That is going to be the challenge, folks.

Chairman KILDEE. Dr. Sackett, maybe you would like to address that. I know you have been concerned with this area.

Mr. SACKETT. Sure. APA is pleased to see that proposed legislation does put into place some technical requirements for these assessments to ensure that they are reliable and valid, meaning they measure what they purport to measure. When we move to something as important as this, it is crucial that a portable credential that someone takes with them from place to place, from setting to setting truly be an accurate and clear statement of the person's level of skill, level of competence. So to mandate in the legislation that any assessment system to be developed be evaluated, be documented as reliable and valid in accordance with professional standards that our associations and other associations have put into place is very important.

Similarly, I see that the legislation makes reference to existing civil rights legislation and to the extent that we say nothing in this bill is contrary to existing civil rights legislation, the Civil Rights Act of 1991 contains a provision should there be any adverse impact in any procedure used by employers for making employment decisions, that employer must be in a position to show that that assessment is, quote, job related and consistent with business necessity. So we have mechanisms for monitoring the success of these systems and for ensuring that the systems do not inappropriately discriminate.

Ms. WOOLSEY. And that is why your argument is to be included on the board?

Mr. SACKETT. Correct.

Ms. WOOLSEY. Thank you.

Chairman KILDEE. Mr. Goodling, then Mr. Miller.

Mr. GOODLING. Just a couple observations and one question.

One of the fears I think I heard expressed numerous times here is that the board could be so politically put together that it would paralyze the whole effort. I think my colleague, Mr. Gunderson, pretty well summarized all the things we need to do and in looking at your testimony, it looks like you have perhaps more questions than answers, which leads me to my question, and not to you but probably to the committee, why must we be trying to rush this through if we have so much to think about and so many concerns?

The legislation originally was supposed to be a fast track bid in relationship to school reform, and I am not quite sure how this got on that fast track program, but listening to your testimony and reading your testimony, I don't believe it would be very wise if we move in that direction.

I would ask, Mr. Sackett, if you might expand on your use of the word "fairness" in this legislation.

Mr. SACKETT. All right. Our concern about the use of the term "fairness" is simply that it is terribly ambiguous. It means many, many different things to many people. As I indicated in the formal testimony, to some people "fairness" means the procedures you develop for administering your assessments be fair, open access, available to all, equal access to preparation, to coaching, et cetera.

To others, the term "fairness" connotes a requirement of equality of outcome, mainly as we indicated some notion that all subgroups of interest in our society must, by mandate, be certified at equal rates. So when some people see the term "fairness," they read into it the suggestion that what is being called for is mandating equal certification rates, which is directly contrary to the provisions in section 106 of the Civil Rights Act of 1991 which prohibits employers from using any system which involves adjustment of scores on any kind of test or assessment in order to achieve equal outcomes.

So to the extent the common theme we hear here is credibility with employers being critical for this work. For employers to find this credible, it has got to be a system that doesn't cause any conflicts with the civil rights legislation with which the employers need to work.

Hence, our recommendation is that this ambiguous term "fairness" with its possible connotations that fairness be achieved through mechanical adjustment of scores to achieve equal certification rates be dropped from the legislation. A statement to the effect that the legislation would require compliance with existing civil rights legislation would eliminate the ambiguity. People understand clearly what is required then.

Mr. GOODLING. Thank you. That is all I have at this time, Mr. Chairman.

Chairman KILDEE. Thank you. Mr. Goodling also serves on the Foreign Affairs Committee and he has to go over and hear the Secretary of State over there so he has to leave at this time.

Mr. Miller.

Mr. MILLER of California. Thank you, Mr. Chairman. I have a number of questions, too, and if I don't get through them in this round, I would like to come back for a second round.

The most revolutionary idea here this morning, Mr. Tucker, is the suggestion that the front end of this bill will produce children who have a capacity to learn. I hope that will happen because it will make this section of it easier for employers.

I am somewhat in agreement with what Mr. Gunderson said about this board. I think this board is put together the way we have done business in the past. I am not convinced that is the way this ought to be done.

This program has been important to the Secretary of Labor and to the President of the United States in their discussions both prior to the election and since the election. They ought to take responsibility for it. One of the best things we can do is to affix responsibility for this Board at a very important level, whether they are secretarial appointments and/or presidential appointments. Let's move on. As Mr. Baroody suggested, 5 years from now when the sunset time comes and either there will be an accounting and either there will or won't be success. That is the way we ought to do business.

We can fight long and hard over this board. I agree with you, Ms. Fields-Tyler, that the board isn't the issue here. To me the issue is the committees, the cluster groups. I am not quite sure what these terms are, but the corresponding groups that will be discussing their industries or cross industries and the standards and skills. The board should be a facilitator. We ought to have people working on these clusters within the industries and with employers and employees and working out what they are going to need.

The suggestion of the heavy involvement of the community college is a very important suggestion. We are spending so much time on the compositions of these committees that we are never going to quite get to the core subject matter here.

The board should be important, but I don't think it is the end game. My concern with the first bill was that the board was doing everything. They were inviting people to "participate," but the board was going to do this initiative. I am thinking much more along the lines that the board ought to be delegating this, whether it is to 20 or 10 clusters, I prefer a limited number because I think that forces people to think broad scale. If you have to fit all your constituent groups even, if you want to be political, into 10 categories as opposed to 50, you are going to have to be a little bit more creative.

A number of things that this panel has said, Mr. Chairman, have been terribly important. The term used in a couple of your written testimonies is the notion that the Federal Government is a "catalyst." Again, I think that is beginning to happen in the most recent drafts of the bill. The board and the Federal Government are shifting from doing this to becoming more of a catalyst with the involvement of specific committees.

Mr. Baroody, when you say that the issue is that this be employer-led, I question whether we are using terminology from the past. When people and this administration points to what they think are

successful companies, such as Saturn, they are really talking about what are serious joint ventures between employees and employers who are involved in the future of that entity and how to ensure its success.

Mr. BAROODY. Absolutely, but things have changed an awful lot and in the best workplaces the old adversaryism and the old dichotomies are gone or diluted, but it is still a question of leadership. We are not here telling you what we think we knew from the past. We are not here telling you as the National Association of Manufacturers what we think is in some narrowly defined interest of ours to push on you. We are telling you what we think we are learning from the partnership we have undertaken with the Department of Labor over the last 2 years, in which partnership we are very careful, insisting upon ourselves that we consulted with workers as well as managers, with workers as well as CEOs, with workers both in union settings and nonunion settings. And what we learned from talking to our members is analogous to this question we raise about the composition of the board. While it is defin- ingly important that frontline workers buy into this process in order to make it work, they tell us that they will not buy into the process unless they believe that management up to and especially including the CEO have themselves bought into it, and so if you write that dynamic large, unless this board is industry-led and therefore credible in industry, we simply don't believe, again, in Mr. Tucker's phrase, that industry will determine anything but that they should have stayed in bed.

In short, the standards that may emerge from them, no matter how technically good, may be ignored because, like it or not, and I share some of your frustration about the fact that we are focusing so much on the structure of the board, but the reason is if it is not structured properly, we believe it may fail and may fail because it is not structured properly.

We believe very strongly that it must be industry-led or it simply is not going to be in tune with the real needs of industry around the country or credible to industry leaders.

Mr. MILLER of California. Thank you. If you want to allow the others to respond, fine.

Chairman KILDEE. Yes. You may finish any response to the question and the 5-minute rule doesn't apply to that.

Ms. FIELDS-TYLER. I want to say something just kind of anecdotal- ly about this industry leadership question. I think this is more per- ceptual in the end than substance, but I think the perception is ev- erything going in.

When we tried to put on the ground our coalition within indus- try to do this, we had to bring together an industry that is, frankly, made up of a bunch of cowboy entrepreneurs. They are the last group of people who want to sit together at a table and try to define across a whole industry as diverse and as sort of dynamic as the electronics industry, the high-tech industry in this country. The only way that we could get them to do it is if we promised this is some way that industry could do for ourselves something that no one else could do for us, by convening the stakeholders for our- selves we could do something for our workforce, for us as employ- ers, and also for the country that could be of great importance to

the overall competitiveness of our economy and to the overall importance, frankly, of the competitiveness of our industry as we compete globally.

Our goal as an association is to make this country the location of choice for high-value-added jobs. When any company, no matter where they are located, looks where in the world do I want to locate high-value-added, high skill, high wage jobs, they are going to look to this country because we have by far a world-class workforce that can do the job that needs to be done. I think if we go into that with that overall goal and think about what it is that pragmatically has to get us there, I think that is where we come up with the industry leadership position. Also the fact that industry has to be at the table with everyone, has to lead a board where everybody has a stake and has a full voting participation.

Mr. TUCKER. Congressman Miller, I hope that we don't polarize this issue of controlling the board versus a decentralized system in which all of the control is in these subunits, whatever they are called.

My own view, just to restate what I said before, but I feel strongly about it, is that the country is best served by an intermediate position. I agreed with you, it makes no sense at all to have this 24-member board setting all the standards, period, full stop. There has got to be a lot more involvement than that. But I would hope again, I think if each one of these groups ends up chunking up the universe without conversation with the others, if each one of these groups invents its own validation standard, if each one of these groups ends up thinking about what an exam looks like very differently, we will wind up with a vulcanized system.

Mr. MILLER of California. I think that would be the purposes of the board, to keep that from happening, but the board can't make up 20 standards.

Mr. TUCKER. It is somewhat more of a catalyst. The board has got to provide some framework, some structure within which these groups work. I wanted to be sure there was some agreement on that point.

Chairman KILDEE. Mr. Strickland.

Mr. STRICKLAND. Thank you, Mr. Chairman.

Dr. Sackett, perhaps because I am a psychologist I have a lot of sympathy with your point of view. I was sitting here wondering, though, is it necessary for a psychologist or a psychometrician to be a part of the board or can the board have access to individuals with such expertise and I think what I would like for you to do for us in just a minute or two, if you could, is to explain to us what some of the negative outcomes could be if these assessment techniques were not to be valid and reliable. What are the negative outcomes that we could expect?

Mr. SACKETT. Well, the key negative outcome if we put into place a system that was not reliable and valid would be that the errors or mistakes or misclassifications made by the assessments would simply have far greater stakes.

Today, if an individual employer puts together an assessment system which is unreliable and invalid and a job applicant is erroneously turned away from one point of view, the damage is comparatively light. That individual can simply go down the street to

the next employer and seek employment. To the extent that we put together a commonly and widely used system, mistakes, errors, misclassifications have far greater consequences. That is the fundamental rationale behind our call for ensuring that there is scientific and technical expertise involved throughout this system of standard setting and the development of assessment systems.

With regard to your question about membership on the board itself, to us the critical feature is the insurance that people with scientific and technical expertise be heavily involved from the beginning and throughout the process. An alternative mechanism to membership on the board such as the provision for a technical advisory committee, I think would meet our needs. Key feature, we cannot set aside or ignore the measurement issues until farther down the road. They have got to be designed into the system or systems that are developed from the beginning.

Mr. STRICKLAND. Thank you. And I would agree with you. I think that if this is not done that we could be creating a national monster here that would just have the most adverse consequences. Yes?

Ms. FIELDS-TYLER. I want to add one point from the employer viewpoint. Of course, of course employers could not use any assessment tools that would have adverse impacts that are not clearly job related, so again there is already protection in current civil rights law. I must tell you we are going about our study, especially on the assessment piece, very guardedly because this is a very, very complex issue. We are drawing upon lots of expertise from the industrial and organizational psychology community as well as from other countries which are already far beyond us in dealing with these issues. So on the employer side we have equal interests that these assessments not have bias in a way that does not—that they do not have—I can't think of the key technical terms here—but at any rate, the goal is that it clearly aligns with current civil rights law and we are not further exposed as employers than through these assessment tools.

Mr. STRICKLAND. Thank you, Mr. Chairman.

Chairman KILDEE. I think I will go back to Mr. Miller for another round of questions at this point. Ms. Woolsey, I am sorry.

Ms. WOOLSEY. Thank you. I was kind of a little bit disturbed about any chance that we will get into some kind of conflict about who chairs this committee. It says in the draft of the bill that the committee chair will be elected by the majority of the board itself and there may be somebody on that board that is the perfect person to facilitate this and for us to pick or choose who that person would represent I think could be the beginning of the end of this whole process, so I would like us to be very neutral on that and let the board pick their own chair.

Chairman KILDEE. Mr. Miller.

Mr. MILLER of California. Thank you, Mr. Chairman.

Can we go back to the issue of what the board does after the committees come up with their recommendations, and what the role of the board ought to be? I think it has ranged from endorsement or certification to just accepting those recommendations.

What is the most valuable role that this board could play at the end of this process in terms of credibility of the standards? Should there be that tension between these groups and the Board? If these

groups have not thought creatively and broadly and futuristically, should the board send them back to the drawing board?

Mr. TUCKER. I don't see an alternative to that, if you are, in fact, going to have a system. If the pieces are going to fit together, it seems to me approval or endorsement by the board as a whole is essential.

If you have the kind of large delegation that you have talked about and I think the members of this board largely agree with, the board is likely to be rather circumspect in its judgment that something isn't right and needs to be changed.

But if there is no such review at the end, then I think the forces operating are almost certain to produce a nonsystem at the end because there will be no—there will be no incentive, in effect, for each of these operating bodies to pay any attention whatsoever to the instructions, if you will, that they get from the board at the outset. Some tension would be useful.

Mr. BAROODY. Mr. Miller, as I have testified, I would caution against reposing with the board itself too excessive an authority to endorse or to send back to the drawing board, if you will, the product of the industry clusters themselves.

I think that the board's appropriate role is to identify the industry clusters and then to establish at the outset what are the criteria we use for judging process and legitimacy as a result but not get into the standard-setting outcomes themselves. I would be very concerned that if the board saw that as its role, the board would—well, would act inappropriately and in ways that, among other things, would undermine the credibility among industry themselves of the outcome of the process. And it would threaten to become over-politicized, a concern that has been expressed from others on the panel.

Mr. MILLER of California. We are in neither a fish nor fowl situation because there is nothing in current law that would prevent the American Electronics Association or some component of the AMA from doing this today. Essentially, that is what you are doing with the grant from the Department of Labor; is that correct?

Ms. FIELDS-TYLER. That is correct.

Mr. MILLER of California. The charge is very similar to the charge that is in this legislation. It doesn't have all of the appointments and stamps of approval, or hurdles, but that is what you are doing. The board couldn't keep the industry from using the standard if the industry wanted to.

By the same token, what is it worth to the industry or to the country to have a certified standard or a board-approved standard? That is what I mean by the tension. It is not to give a veto one way or the other, but is it worth something in the international arena to have this certified standard? How much is it worth to having an AEA-certified standard?

Mr. BAROODY. I would simply say I think it would be worth a lot to have the AEA continue what it is doing and have other industry sectors take up the similar undertakings, and that, I think, is what the board is intended and designed properly to catalyze.

But if the board goes much beyond that, I am concerned that the board—well, at a minimum it is understated that 3 to 5 years from now, when Congress looks at what it has wrought, it will look with

some disappointment on the fact that it has wrought something that industry—that is not followed. That is what we are primarily encouraging you to guard against. And too active and too dominant a role of the board itself will yield that result, we fear.

Mr. MILLER of California. No, I agree. Clearly, one, the board should exist. Two, the board should set the criteria which they want these panels to follow. Then the panels ought to go to work.

The presumption would be that if the panels are made up of the enlightened forces within an industry, they would come up with something that is in their best interests and the country's best interests.

The only question I raise is what is it worth to then have that certified? This simply says that the board shall certify. It doesn't set out the basis on which it can decertify them or send them back. It simply says the board shall certify standards—or have the power to certify standards that are proposed.

Mr. BARODY. I guess that is the concern, is that having the power to certify also implies the power not to certify.

Mr. MILLER of California. I am a suspicious man.

Let me ask you something else on the criteria. A number of you mentioned the portability of these skills, should you get them. I don't see that anywhere in this legislation as it is set forth. But I assume you believe that is important: that a worker ought to be able to move across industry, across State lines, depending on whether the economy is healthy or not. So that should be in this legislation. Maybe I am missing it, but I simply don't see it.

Ms. Fields-Tyler, what you are doing now within AEA? How different is that from what you would expect, assuming that this is a properly defined cluster or committee? I can only think of these candy bars, Clusters, the more I think of that.

How different is what would happen here from what you are doing?

Ms. FIELDS-TYLER. Actually, I mean we have designed our vision of this going in, assuming that, if not this board, some entity will convene various industries with common interests to get to the point that we think we need to get to as a country.

Just as a concrete example—

Mr. MILLER of California. But they are not going to make you start over from scratch, are they?

Ms. FIELDS-TYLER. I sure hope not because we are going to have a very compelling product at the end of the year that is going to help us understand how this all could work.

For instance, in the manufacturing specialist area—and we are right now in the beginning. Thursday and Friday is our first set of focus groups with workers and supervisors, people actually doing these jobs. It is how our standards is going to be formulated, so it is worker-driven in that regard.

But, at any rate, what we expect to find is that there is a whole set of competencies to be a manufacturing specialist that transfer very easily across a lot of different industries. There may be a few that are specific to the high-tech industry that have to do with high-tech equipments and processes, maybe with the levels of tolerance in the manufacturing environment that we deal with, maybe because of the particular function of our industry in the economy

that we would want to include in there, but that would be an add-on beyond the basic manufacturing specialist certification.

Say you go to your local community college, and you thought, I know I want to go into manufacturing, but I don't know what industry is going to hire me when I get out. I will get the general manufacturing specialist certification. I start to see that there is a lot of job-wanted ads in the Pacific Northwest or in California, hopefully, some day, basically stating that they want—

Mr. MILLER of California. If this board could do that, we are all for it.

Ms. FIELDS-TYLER. That is right. Basically stating that there is some job opportunity in the electronics industry. So I go ahead and get the additional four or five credentials or that group of credentials that is specific to the electronics industry.

It may be that we can even, through lots of grassroots networks—and our industry is very interested in this—work to some degree at the State level to even further specify this based on local market needs so that, for instance, in Washington State where the electronics industry is heavily aerospace, that could even be further tailored there.

That is what happens in the industry clusters alone. That does not supplant this general set of competencies that have to go across lots of different industries.

And I think it is very important that we think in that regard so that people understand if they get an aerospace job in the Pacific Northwest and it goes away what is it that they can know and do that could transfer to the food processing industry or to other technology industries or to the timber processing industry or whatever.

Mr. MILLER of California. I take it from the enthusiasm in your voice that you don't feel second-class because you weren't presidentially appointed. You got this grant, you got people together in the industry, and you are striking off in this distance.

I am worried that we have the potential to make this far more complicated than it really is. That is my worry. I think that it is a very significant step for this Nation to take, because it starts to rationalize something that we have ignored for a long time.

But I would really like to get on the road, so to speak. I fear we spend more time packing all the luggage around here than we do spending time on the trip. I worry that 28 appointments—this administration hasn't made 28 appointments since it has been in office! So I am a little worried that this legislation will sunset, and there won't be anybody in the seats.

From your industry, and I assume you are representing a cross-section, this is turning out, as far as it has gone, to be a successful model to achieve the goal that you think you want to achieve.

Ms. FIELDS-TYLER. Yes.

Mr. MILLER of California. We ought to be thinking as we do this how we incorporate that model, if it works for others, into this process.

Ms. FIELDS-TYLER. There are other demonstration projects, one from the Department of Education or a couple of them, actually—seated at this table as well as others that also have very promising models underway. And I would suggest, as the bill does now, that all the demonstration projects—

Mr. MILLER of California. Be incorporated?

Ms. FIELDS-TYLER. Exactly. Because we are learning so much. There is a lot about this that we are beginning to understand.

Mr. MILLER of California. On the question of apprenticeships—and I appreciate the politics of the exclusion—shouldn't we, at a minimum, have a cluster group that looks at apprenticeship programs to determine whether they are thinking about the future? Isn't there a way to move this from exclusion to at least thinking about it? A significant number of people get enrolled in these apprenticeship programs.

Mr. TUCKER. There are 300,000 a year.

Mr. MILLER of California. Pardon?

Mr. TUCKER. About 300,000 a year.

Mr. MILLER of California. Yes. The question is, are they there for a career or future? Or is it short-term? Or does it work?

Ms. PIESERT. Well, I would just say that for the apprenticeship piece of this, this really would open the door to exploring new areas for apprenticeships such as in the service industry, in the hospital sector, in the health care sector, structured workplace learning.

Mr. MILLER of California. That is why I am asking. Is there a generic way that you can look at registered apprentice programs or however you want to define them, to see how they fit into these models? That is all I am asking. Their rights should not be changed or how they have been bargained and arrived at should be changed. I am asking the generic question of how they fit in.

Mr. TUCKER. I think my view on this is you don't want an apprenticeship cluster if the construction—if construction turns out to be a cluster, and it seems quite likely that it would, that issue is going to come up. It has to. And you are going to deal with it within—

Mr. MILLER of California. It doesn't have to.

Mr. TUCKER. It has to either as a settled or as an unsettled issue. If the legislation says we have taken registered apprenticeships out and set them on the shelf, then that is a condition that the group faces.

But if you are in the construction industry and you are worrying about skill standards, the question will arise. You could have settled it by legislation or left it on the table. And if it is on the table, they have to deal with it.

Mr. MILLER of California. You think it is on the table?

Mr. TUCKER. Yes. Oh, yes.

Mr. MILLER of California. Thank you.

I have taken more than enough time, Mr. Chairman. I appreciate it. I think this panel has been very helpful, and I would hope that we would incorporate some of the recommendations that have been made here this morning into the legislation.

Chairman KILDEE. I agree with you, Mr. Miller. It has been a very, very good panel. I have some of the same concerns. I asked that earlier, how you plug into apprenticeship programs. They could lead to apprenticeship programs on that, and I think I have some of the concerns that Mr. Miller has. But this has been a very, very excellent panel. Collectively and individually, you have helped us get some insights into this Title IV.

The Title IV was important, and we really wanted to have this special hearing just on this.

I have been to many a hearing where—I have never been to a real bad hearing, but I have been to some that weren't as good as others. This is certainly one of the better hearings I have attended in my 17 years here in Washington, and we will keep the record open for an additional 2 weeks for any additional testimony. And thank you very much.

[Whereupon, at 11:45 a.m., the subcommittee was adjourned.]



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